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ABSTRACT

As part of a series of tri-annual studies of youths' substance use and abuse behaviors, attitudes, and knowledge, begun in 1975, this report provides normative and trend data for the 1981-82 study. The research issues which were the foci of this study are: present status and important trends of youths' substance use, attitudes, and knowledge; major influence on youths' decisions to use or not use substances; and implications for action based on the study's findings. The introduction and section two provide the background and procedures for the study, which followed the same sampling design and techniques used in the 1975 survey, i.e., a stratified random sampling of Iowa public school districts, representing urban, semi-urban, semi-rural, and rural populations, with a random minimum sample of 18 students from the 6th, 8th, 10th, and 12th grades in each of the schools. The research results are presented in five sections containing text and illustrative tables. Section three, Self-Reported Substance Use and Nonuse, provides data on alcohol, tobacco, marijuana, other drugs, and polysubstance use and nonuse. Section four, Influencers of Substance Use and Nonuse Behavior, presents data concerning the influence of family, schools and peers on youths' substance use and abuse decisions. Section five, Personal Variables, presents an overview of personal variables and their relation to alcohol, marijuana, and other drug behavior. Section six, Summary and Recommendations, lists and summarizes findings relevant to the four research issues, and includes specific recommendations for schools, families, and youth service agencies. (WAS)

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1981-82 Iowa Study of Alcohol and Drug Attitudes and Behaviors Among Youth

Report I: Normative and Trend Data

David Wright

Prepared by
Substance Education Program
Alternative Program Section
February 1982

CG 016640

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Preface

The Substance Education Program within the Iowa Department of Public Instruction (DPI) began a series of tri-annual studies of youth substance behaviors, attitudes and knowledges in the fall months of 1975. The youth studies have continued with data collections in 1978 and 1981.

The findings of the 1975 and 1978 studies were disseminated to Iowa educators, health planners, and agencies which provide services to youth. These reports were useful in planning and implementing substance education and prevention programs in Iowa. The report of the 1981 findings should prove to be as useful.

The findings of the 1981-82 Iowa Study of Alcohol and Drug Attitudes and Behaviors Among Youth will be presented in two separate reports:

- normative data for 1981-82 and relevant comparisons with 1975 and 1978 findings
- psychosocial variables associated with substance nonuse and use among Iowa youth

The following report deals with normative data on several items from the 1981-82 youth survey. Some data comparisons with prior studies are also presented. This report is intended to be of particular use to school persons, health planners, and persons in the substance abuse field.

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I. Introduction

Substance use continues to present some serious social problems for school persons, law enforcement persons, health professionals, and citizens of Iowa communities. Substance use and abuse always present possible harm to the health of the user and the well-being of his/her family. It is important to have current data on youths' substance behaviors, knowledges, and attitudes in order to responsibly address these social and health issues.

During the 1970's, a number of prevention programs were introduced in Iowa schools and communities in an attempt to reduce the occurrence and severity of the social and health problems related to substance use. Several significant socioeconomic events (e.g., rise in unemployment and declining enrollments) have occurred in recent years. These prevention efforts and socioeconomic events have very likely affected youth's substance behaviors and attitudes.

The 1981-82 Iowa Study of Alcohol and Drug Behaviors and Attitudes Among Youth attempted to answer four research questions:

- What is the present status of substance use, attitudes, and knowledge among youth?
- What are some important trends in youth's substance use, attitudes, and knowledge?
- Who seem to be major influences in youth's decisions to use or not use substances?
- What actions do the findings of the 1981-82 study suggest for school persons and others to follow?

Several investigators have studied adolescent substance use. These prior studies have identified a large number of variables that have particular relevance for assessing substance use, attitudes, and knowledge among youth. Of particular relevance to the present study were the research designs and findings of three groups of researchers.[1] These prior studies suggested that the survey instrument for the 1981-82 Iowa Study of Alcohol and Drug Attitudes and Behaviors Among Youth should be organized to include the following variables:

Dependent Variables:
- Use/Nonuse of Substances

Independent Variables:
- Parent modeling behaviors
- Parent normative standards
- Peer modeling behaviors
- Peer normative standards
- School normative standards
- Perceived school influence

Intervening Variables
- Adolescent preferences
- decision-making style
- motives for not using substances
- motives for using substances
- intent to use substances as an adult
- religiosity

Adolescent norms
- attitudes toward substance behaviors
- general substance attitudes
- age of onset for substance use
- conventional (nonsubstance) behaviors
- deviant behaviors

[1]Richard Jessor; Chase, James A.; and Donovan, John E. "Psychosocial Correlates of Marijuana Use and Problem Drinking in a National Sample of Adolescents". *American Journal of Public Health*. Vol. 70, No. 6, June, 1980, pp 604-

Biddle, Bruce J.; Bank, Barbara J.; and Martin, Marjorie M. "Parental and Peer Influence on Adolescents" *Social Forces*. Vol. 58. June, 1980, pp. 1057-1079.

Johnston, Floyd D.; Backman, Jerald G.; and O'Malley, Patrick M. *Highlights from Student Drug Use in America 1975-1980.* Rockville, Maryland: National Institute on Drug Abuse, 1980.

Items were selected from the 1975 and 1978 Iowa youth surveys to sample the above-mentioned variables. Some new items were added to the 1981-82 youth survey to cover variables not previously assessed.

A pilot testing of the 1981-82 youth survey was conducted during April, 1981 in six Iowa school districts and in two treatment centers for adolescent substance abusers. The pilot study produced a 110-question survey instrument which was administered state-wide in October-November, 1981.

The final version of the youth survey was designed to be answered anonymously by students in grades 6, 8, 10, and 12 in less than 50 minutes.

II. Procedures

The 1981-82 Iowa Study of Alcohol and Drug Behaviors and Attitudes Among Youth followed many of the same procedures used in the 1975 and 1978 studies.

In late August, 1981, a letter was sent to the superintendent of each of 100 school districts. Each superintendent was informed of the purposes of the study and the procedures to be followed locally. The superintendent was given the choice of participating or not participating in the youth survey (12 districts chose not to participate). The letter specifically asked them to do the following:

- randomly select students for grade-level samples
- schedule times and places for group administration of the survey
- send parent consent letters home with students
- return completed surveys to the Department of Public Instruction by December, 1981

Completed youth surveys were edited and coded upon receipt at the DPI. Data from individual survey forms were key-punched and entered on a computer file. Data analyses were conducted through the use of an SAS program.

In February, 1982, a data packet was returned to each of the participating school districts. The data packet contained local data on selected items from the 1981 survey and local data from the 1975 and/or 1978 studies.

1. Selection of District Samples

The present study attempted to use the same sampling design and sampling techniques as were used in the 1975 youth survey.

A stratified random sample of Iowa public school districts was prepared for the 1975 youth survey. The 1975 sampling design represented four population categories (urban, semiurban, semirural, and rural) of Iowa public school districts based on the total school enrollment and the general population density within each school district. The sampling design also accounted for representation of school districts acccording to four geographical regions and the boundaries of fifteen area education agencies. School districts were selected on the basis of their enrollments, population densities within the district, and their distribution within the fifteen area education agencies.

The 1975 sampling design was reviewed with 1980 U.S. Census data and 1980-81 school enrollment data. The design was found to be appropriate for the 1981-82 youth survey.

Table I describes the distribution and rate of participation in the 1981-82 youth survey. The sample very well represents Iowa public school districts.

Comparisons of data between 1975, 1978, and 1981 dictated that several school districts had to be represented at least twice in the series of studies. Sixty-five public school districts from the original (1975) sample participated in the 1981 study.

The addition of 23 districts to the 1981 study was based on two rationales: another urban district was needed to provide adequate representation of that student population and special programming had been introduced in 22 districts (12 districts with peer helping programs and 10 districts with Berkeley/Seattle health education projects). Because this purposive sample introduced some sampling bias, their youth data was removed from comparisons across the three study years (1975 vs. 1978 vs. 1981).

Eighteen school districts from the original sample (1975) chose to not participate in the 1981-82 study.

2. Selection of Student Samples

Student samples were selected within building sampling units and from grade level enrollments. The superintendent was informed of individual buildings within the district from which student samples were to be selected. School personnel were to select at random a minimum sample of 18 students in each of the 6th, 8th, 10th and 12th grades. A small district, therefore, was expected to draw a minimum sample of 72 students. Larger

districts with more attendance centers were expected to produce larger student samples.

Data in Table II describe the actual and ideal student samples by size categories of schools. The data in Table III describe the actual and ideal distribution of student samples by grade-level.

A weighting procedure was applied in the data analyses to account for discrepancies between the ideal and actual student samples. Similar weighting procedures were also applied with 1975 and 1978 data in order to make comparisons across studies.

The data in Table IV describe the sex and grade-level distribution in the 1981 youth sample. Female students were slightly over-represented in grades 10 and 12.

The following are some sampling biases which should be considered in interpreting the results of the 1981-82 youth survey:

- School districts were permitted to not participate in the survey; 70% of the original 1975 sample participated in the present study.
- Students and parents were permitted to not participate in the survey; 81% of the school districts met or surpassed their minimum sample size.
- No attempt was made to sample students who were absent from school or youth who had "dropped out" of school.

Table I
School District Samples for 1981

Categories of Districts

	Urban	Semiurban	Semirural	Rural	Total
Total Number of Iowa Districts in Category	8	24	54	355	441
Original Sample Size (Districts)	4	20	21	48	83
Number of Districts From Original Sample in 1981 Study	3	14	17	31	65
Purposive Sample (Districts Added to 1981 Study)	1	2	4	16	23
Total Number of Districts in 1981 Study	4	16	21	47	88
Percent of Total Number of Iowa Districts in Categories	50%	66.7%	39%	13%	20.0%

Table II
Student Samples by District Size Categories

	Urban	Semiurban	Semirural	Rural	Total
Actual Sample	1353 (20%)	963 (14.5%)	1230 (18.6%)	3079 (46.5%)	6625
Ideal Sample	1664 (25%)	1231 (18.6%)	1207 (18.2%)	2533 (38.2%)	6635

Table III
StudentSamples by Grade Levels

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Actual Sample	1740 (26%)	1749 (26%)	1498 (23%)	1591 (24%)	6578
Ideal Sample	1509 (23%)	1575 (23%)	1709 (26%)	1783 (27%)	6623

Table IV
Students Completing the Survey by Grade Level and Sex

0

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Male	877 (50.4%	888 (50.8)	702 (46.9)	738 (46.4)	3205 (48.7)
Female	862 (49.5)	860 (49.2)	794 (53.0)	852 (53.6)	3368 (51.2)
Totals	1740	1749	1498	1591	6578

3. Youth Survey Instrument

A 110-item survey instrument was prepared for administration to students in grades 6, 8, 10, and 12. The instrument was designed to be readable and answerable by students at each of the four grade levels. Students were informed that it would take less than 50 minutes to complete the survey, that they could choose to not respond to some questions, and that their responses would remain confidential.

The actual survey was organized as follows:

Demographics: Questions 1-6
Peer Influence: Questions 13-15, 38-43, 47-49, 61-66, 67-69
Parent Influence: Questions 8-12, 44-45, 47, 61-66, 104-106, and 107-110
School Influence: Questions 6, 44-46, 61-66, 86-90, and 97
Personal Preferences: Questions 16-37, 44-46, 47-49, 67-70, 71-84, 91, 92-97, and 98-103
Substance Use/Nonuse: Questions 50-60

Several questions were purposively designed to have students rate/assess the magnitude of the influence exerted by peers, parents, and school upon their substance behaviors.

Ten superintendents requested that they be permitted to omit questions 107-110 from the survey in their districts. These questions relate to parent alcohol and tobacco use. The omission of the questions did not detract from the findings of the study.

The remainder of this report presents findings of the study grouped into four sections: Self-Reported Substance Use, Influencers of Substance Use/Nonuse Behaviors and Personal Variables. The final sections of the report provide a summary and some recommendations.

III. Self-Reported Substance Use and Nonuse

The following pages describe findings related to student substance use and nonuse. These findings are based on self-reported use and nonuse during the fall months of 1981.

Substance use data in the 1981 study were comparable to such data collected nationally by the Institute for Social Research at the University of Michigan. Comparisons of self-reported use between the four categories of school districts also appeared to substantiate the reliability of the substance use/nonuse data.

This part of the report is divided into five sections: Alcohol Use and Nonuse, Tobacco Use and Nonuse, Marijuana Use and Nonuse, Other Drug Use and Nonuse, and Poly Substance Use. Within each section data are presented according to the following format:

Age of Onset
Frequency of Use by Grade Level (1975-78-81)
Frequency of Use by Sex (1975-78-81)
Frequency of Use by District Size (1975-78-81)
Intent to Use as Adult
Summary

Some information regarding the frequency of substance use was clustered. The frequency-of-use questions (question 54 alcohol, question 58 marijuana, and question 60 other drugs) each had nine possible responses. These nine response possibilities were clustered as follows:

Nonuse included: I never use/drink, and
I have used--, but I don't now

Casual use included: Less than once a month, and
About once a month

Regular use included: 2 or 3 times each month, and
About once a week

Heavy use included: 2 or 3 times a week,
4 or more times a week, and
About once or more each day.

The frequency of tobacco use (Question 56) was reported in tables as follows:

Nonuse included: I never smoke tobacco, and
I have smoked, but I don't now

Casual use included: Smoke occasionally (1-6 times) each week

Regular useincluded: Smoke several times (7-25) each week

Heavy use included: Smoke 4-10 times each day, and
Smoke more than 11 times each day

The term **ever used** included any reported frequency of use and the response "I have used--, but I don't now".

All data appearing in tables were percentages of samples responding to a question.

1. Alcohol Use and Nonuse

The age of onset for alcohol use was assessed by asking students how old they were the **first time** they ever had their own glass of beer, wine, shot of liquor, or a mixed drink of any kind. Student responses for this question are reported in Table V.

Some observations are appropriate from Table V. Approximately 94% of the 12th grade sample had tried alcohol. Most youth (63-78%) had tried alcohol by age 14. A greater percentage of 6th and 8th grade youth had tried alcohol by age 12 than had their 10th and 12th grade counterparts. This pattern for the age of onset in 1981 closely paralleled the pattern for 1978. The 1978 data indicated that by age 12 approximately 53% of 6th grade, 63% of 8th grade, 46% of 10th grade, and 34% of 12th grade students had tried alcohol.

Table V
Age of Onset for Alcohol Use by Grade Levels*

	Never Tried Alcohol	Tried Alcohol by age 12	Tried Alcohol by age 14	Tried Alcohol by age 16	Tried Alcohol by age 18
Grade 6	46.4	47.5 (53.6)			
Grade 8	21.7	60.1	72.6 (78.3)		
Grade 10	10.7	45.4	75.5	84.1 (89.3)	
Grade 12	5.8	35.4	62.7	85.7	90.1 (94.2)

*Data in parentheses represents the inclusion of sample percentages for "Don't remember"

Age of onset data for 12th grade students in 1975 and 1978 did not vary from 1981 data. For 12th grade students, the percentages who had never tried alcohol were 5% in 1975, 6% in 1978, and 6% in 1981. More than 50% of the 12th grade students in 1981 had tried alcohol between 13 and 16 years of age. This compared with the 49% of 12th grade students in 1978 who had first tried alcohol between 13 and 16 years of age.

The frequency of alcohol use by grade level is reported in Table VI. This table presents the reported frequencies of alcohol use in 1975, 1978, and 1981.

Students were asked to identify the frequency of their alcohol use through the question "During an average month, how often do you usually drink **any amount** of beer, wine, or liquor?"

Table VI
Percentages of Grade Level Samples Reporting Alcohol Use in 1975, 1978 and 1981

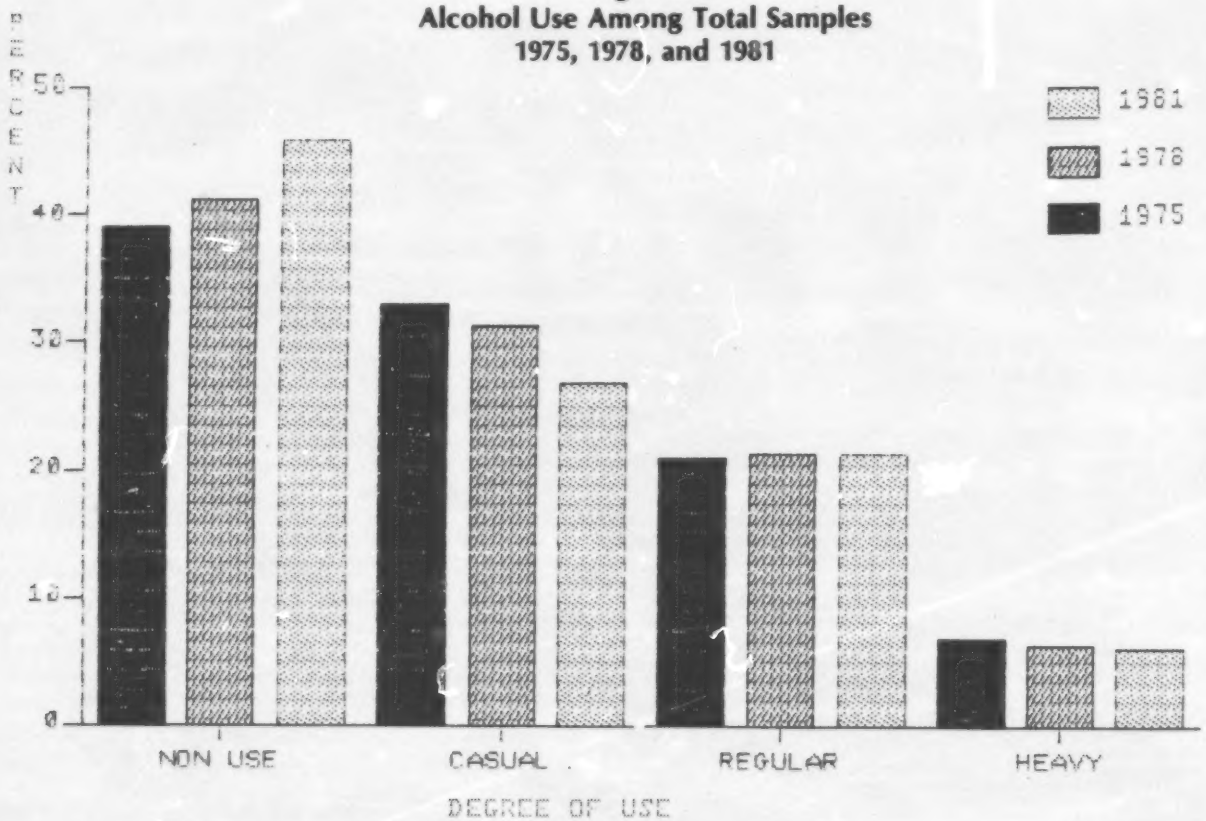
		Total	6th Grade	8th Grade	10th Grade	12th Grade
Nonuse	1975	39.1	62.6	43.3	26.6	16.1
	1978	41.2	67.5	52.0	28.0	19.2
	1981	45.8	72.6	53.7	32.7	19.8
Casual	1975	33.0	27.8	37.3	38.2	28.3
	1978	31.2	23.6	33.9	36.0	26.9
	1981	26.9	20.6	30.6	33.3	23.5
Regular	1975	20.9	7.8	16.2	27.9	36.5
	1978	21.3	7.3	11.9	29.6	36.8
	1981	21.3	5.8	14.3	28.6	39.4
Heavy	1975	6.9	1.7	3.2	7.3	18.4
	1978	6.2	1.6	2.3	6.4	15.1
	1981	6.0	1.1	1.4	5.4	17.3

A few general patterns are apparent from the 1981 data in Table VI. The frequency of alcohol use increased with age. The greatest decrease in the number of nonusers seemed to occur between the 8th and 10th grades. A relatively large increase (10%) in the number of casual users of alcohol seemed to occur between the 6th and 8th grades. The largest increase (14%) in regular use of alcohol was apparent between 8th and 10th grades. The greatest increase (12%) in heavy use of alcohol was observed between 10th and 12th grades.

More students reported themselves to be nonusers of alcohol in 1981 than did students in 1975 or 1978. This downward trend in alcohol use was particularly significant within the casual and heavy use categories. The only exception to the overall trend was the 3% increase in regular use observed for 12th grade students.

Figure 1 illustrates an increase in the number of nonusers of alcohol in 1981 as compared to 1975 and 1978. The graph also demonstrates a decline in the number of casual users of alcohol. Regular and heavy use among the total samples appear to remain consistent over the three study years.

Figure 1
Alcohol Use Among Total Samples
1975, 1978, and 1981



Sex differences in the use of alcohol are reported in Table VII. When data from 1975, 1978, and 1981 were compared, a trend toward equivalence in the frequency of alcohol use was disclosed. Females appeared to use alcohol in very similar patterns to males. There were slightly more nonusers of alcohol among females than males. There was a slightly greater number of heavy users among males than among females.

Some differences in alcohol use among the four categories of school districts are evident in Table VIII. In general, alcohol use in 1981 appeared to be more prevalent in rural school districts than in the remaining three categories of school districts. The least frequent use of alcohol in 1981 appeared to be within semiurban school districts. The exceptions to these statements were the 6.7% of the urban sample who were heavy users and the 5.7% of the rural sample who were heavy users.

Comparisons between school district categories in various survey years indicated an increase in the number of nonusers of alcohol in 1981. This increase in nonuse seemed to occur in urban, semiurban and semirural school districts. A comparison between 1981 and 1978 data indicated an increase in heavy use among urban and

semiurban districts and a decrease in heavy use among semirural and rural districts. There was a decrease from 1978 to 1981 in the casual use of alcohol in the urban, semiurban, and semirural districts.

Table VII
Percent Male and Female Reporting Alcohol Use in 1975, 1978 and 1981

		Nonuse	Ever Used	Casual	Regular	Heavy
Male	1975	33.4	*	35.3	22.7	8.7
	1978	29.4	71.2	29.1	23.6	7.8
	1981	30.4	69.6	26.7	23.4	8.7
Female	1975	45.0	*	30.8	19.2	5.2
	1978	42.7	63.7	33.1	19.3	4.8
	1981	35.3	64.7	25.6	23.5	5.2

*Unable to calculate due to wording of question in 1975

Table VIII
Percentages of Student Samples Reporting Alcohol Use by District Size in 1975, 1978 and 1981

		Urban	Semiurban	Semirural	Rural	Total Sample
Nonuse	1975	40.8	41.0	38.5	37.3	39.1
	1978	35.7	43.6	42.0	43.2	41.2
	1981	46.7	49.7	45.6	42.8	45.3
Casual	1975	31.9	30.6	32.7	35.1	33.0
	1978	38.5	31.6	29.2	27.6	31.2
	1981	25.9	25.4	25.9	29.2	27.2
Regular	1975	19.5	21.7	20.7	21.6	20.9
	1978	20.5	20.0	22.3	22.0	21.3
	1981	20.7	19.2	22.2	22.4	21.5
Heavy	1975	7.8	6.7	8.1	5.9	6.9
	1978	5.3	4.8	6.6	7.1	6.2
	1981	6.7	5.7	6.2	5.7	6.0

Table IX presents data for student responses to the question, "When you are 21 years old, how often do you think you will drink alcoholic beverages?" This question required students to estimate what frequency of alcohol use they might adopt as adults.

Intent to use alcohol seemed to vary with age. The percentages of students who reported that they would not use alcohol or would use it once a month decreased with each increase in grade level. The percentages of students who stated that they would use alcohol once or about two or three times each week increased with each increase in grade level. The percentages (3-5%) of students who intended to use alcohol about every day remained fairly constant across grade levels. Very few students (14-28%) intended to not use alcohol as adults.

Table IX
Students' Intentions to Use Alcohol at Age 21*

	6th Grade	8th Grade	10th Grade	12th Grade	Total
I will not drink alcoholic beverages	38	24	18	14 (19)	23
About once a month	32	29	28	25 (24)	29
About once each week	16	25	31	34 (29)	27
About two or three times each week	10	17	20	22 (14)	17
About every day	3	5	4	5 (3.5)	4

*Numbers in parentheses represent percentages of 12th grade sample reporting alcohol use in 1981

The following statements summarize some of the more relevant findings concerning alcohol use and nonuse:

- very few (6%) twelfth grade students had not tried alcohol.
- Although a greater percentage of sixth and eighth grade students had tried alcohol, there has been a decrease in the casual, regular, and heavy use of alcohol among these student groups.
- Very few differences existed between male and female patterns of alcohol use.
- Between 1975 and 1981, the number of male alcohol users increased by 3% while the number of female alcohol users increased by 10%.
- The nonuse of alcohol has increased in urban, semiurban and semirural districts.
- A small percentage of students did not intend to use alcohol as adults; more than 73% of the students intended to adopt a "moderate" alcohol use pattern as adults.
- More students reported themselves to be nonusers of alcohol in 1981 than had students in either 1975 or 1978.
- Very few differences existed between male and female patterns of alcohol use.
- Between 1975 and 1981, the number of male alcohol users increased by 3%, while the number of female alcohol users increased by 10%.
- The nonuse of alcohol has increased in urban, semiurban, and semirural districts.
- A small percentage of students did not intend to use alcohol as adults; more than 73% of the students intended to adopt a "moderate" alcohol use pattern as adults.

2. Tobacco Use and Nonuse

Data on tobacco use were not collected in the 1975 and 1978 studies. Comparisons between years could not be made in this report.

The age at which students first tried tobacco is reported in Table X. Students responded to the question, "How old were you when you **first** tried tobacco?"

The data in Table X indicate that a large number of students have tried tobacco. The number of students who tried tobacco appeared to increase with age, with approximately 53% of the students trying tobacco by 14 years of age. The largest number of students who tried tobacco seemed to be within the age range of 9-12 years.

Table X
Age of Onset for Tobacco Use

	Never Tried	Tried Tobacco by Age 12	Tried Tobacco by Age 14	Tried Tobacco by Age 16	Tried Tobacco by Age 18
Grade 6	73.8	24.9 (26.2)			
Grade 8	52.8	40.0	45.9 (47.2)		
Grade 10	37.3	44.1	57.4	61.1 (62.7)	
Grade 12	28.0	40.5	55.8	67.6	70.6 (72.0)

*Numbers in parentheses include percentages of student samples reporting "Don't remember"

The frequency of tobacco use is reported in Table XI. This data reflects student responses to the question "During an average **week,** how often do you usually smoke tobacco . . . cigarettes, pipes, cigars?"

There was a pattern of increased tobacco use with each higher grade level. The largest decrease in the nonuse of tobacco appeared to occur between 6th and 8th grades. The greatest increase in the casual and regular use of tobacco seemed to occur between 8th and 10th grades. The largest increase in the heavy use of tobacco apparently occurred between 10th and 12th grades.

Table XI
Percentages of Grade Level Samples
Reporting Tobacco Use in 1981

	Total	6th Grade	8th Grade	10th Grade	12th Grade
NonUse	67.0	84.0	68.4	61.2	57.3
Casual	5.3	2.7	5.0	7.2	6.1
Regular	2.3	.6	1.7	2.8	3.7
Heavy	6.9	.5	3.4	8.4	13.7
Stopped	18.5	12.3	21.5	20.5	19.2

Comparisons between male and female patterns of tobacco use in 1981 are reported in Table XII. The data suggested that males were slightly less likely to smoke tobacco than were females. Males also seemed to be more likely to have stopped smoking than were females. Casual and heavy use was slightly more common among female than male students. Some caution must be observed in interpreting these data since the use of snuff and chewing tobacco was not assessed in the survey.

Table XII
Percent Male and Female Reporting Tobacco Use

	Never	Stopped	Casual	Regular	Heavy
Male	67.4	19.6	4.3	2.3	6.4
Female	66.6	17.5	6.3	2.2	7.4

A brief examination of the data in Table XIII indicated that there were few differences in the numbers of students who were regular and heavy users of tobacco across the various school district categories. Regular and heavy use of tobacco seemed to be slightly more prevalent in semirural districts than in the other three categories. The number of students who reported that they had stopped tobacco use appeared to be higher in semirural and rural districts.

Table XIII
Percentages of Student Samples Reporting Tobacco Use by District Size in 1981

	Urban	Semiurban	Semirural	Rural	Total
Never	69.9	71.9	67.8	67.3	68.7
Stopped	16.1	16.7	18.6	18.4	17.7
Casual	5.6	3.6	4.4	5.9	5.1
Regular	1.9	1.9	2.5	2.1	2.1
Heavy	6.6	5.9	6.8	6.5	6.4

Table XIV describes the patterns of tobaccco use students intended to adopt as adults. The data reflected student responses to the question, "When you are 21 years old, how often do you think you will smoke tobacco?"

Approximately 80% of the students did not intend to smoke tobacco as adults. There were very few differences between grade level samples in their intentions to use tobacco occasionally or several times each week. Very few 6th grade students, as compared with 12th grade students, intended to use tobacco 4 or more times each day.

The intentions of 12th grade students to use tobacco as adults (age 21) closely corresponded with their actual reported use of tobacco in 1981.

The 1981 data for tobacco use and nonuse suggested that the following observations were relevant.

- A majority of youth have tried tobacco with the greatest initial use occurring between 9 and 12 years of age.
- Approximately 15% of Iowa youth were tobacco smokers; the percentages ranged from 4% of 6th grade students to 24% of 12th grade students.
- The greatest increase in the casual and regular use of tobacco occurred between 8th and 10th grade; the largest increase in heavy tobacco use occurred between 10th and 12th grade.

Table XIV
Students' Intentions to Use Tobacco at Age 21*

	6th Grade	8th Grade	10th Grade	12th Grade	Total Sample
I will not smoke tobacco	91.0	84.0	80.0	79.0 (76.5)	84.0
Occasionally (1-6 times)each week	7.0	8.0	8.5	6.0 (6.1)	7.0
Several times (7-25) times each week	1.5	3.0	3.0	3.0 (3.7)	2.5
About 4-10 times each day	1.0	2.0	4.0	5.0 (13.7)	3.0
About 11 or more times each day	.5	3.0	5.0	6.0	3.5

*Numbers in parentheses represent percentages of 12th grade sample reporting tobacco use in 1981.

- Very few differences in the patterns of tobacco use existed between male and female students.
- Very few differences were apparent in tobacco use patterns between categories of school districts.
- Approximately 80% of the youths in the survey did not intend to smoke tobacco as adults.

3. Marijuana Use and Nonuse

Students were asked to respond to the question, "How old were you when you **first** tried marijuana (pot, grass, hash)?" Their responses to this question are reported in Table XV.

The data in Table XV indicated that most youth who have tried marijuana did so between 13 and 16 years of age. Approximately 44% of the 12th grade students had tried marijuana by age 18. This compares with 43% of 12th grade students in 1975 and 44% of 12th grade students in 1978.

Data from 1978 indicated that 75% of 6th grade, 85% of 8th grade, 66% of 10th grade and 56% of 12th grade students had not tried marijuana. In comparison, slightly more students in each of grades, 6, 8, and 10 had not tried marijuana in 1981.

Frequency of marijuana use by grade level samples is reported in Table XVI. Students responded to the question, "During an average month, how often do you usually use any amount of marijuana (pot, grass, hash)?"

Frequency of marijuana use by grade level samples is reported in Table XVI. Students responded to the question "During an average month, how often do you usually use any amount of marijuana (pot, grass, hash)?"

An overview of Table XVI indicated that 1.5% to 22.3% of the 1981 sample reported current use of marijuana. The use of marijuana increased with each increase in grade level. The largest increase in the number of casual and regular users of marijuana seemed to occur between 8th and 10th grades. The largest increase in the heavy use of marijuana was evident between 10th and 12th grades.

A comparison of marijuana data for 1975, 1978 and 1981 disclosed a trend in 1981 toward less student use of marijuana at each grade level. This decline in marijuana use was particularly evident for casual and heavy use among 10th and 12th grade students. Declines in the casual and regular use of marijuana were also noted for 8th grade students.

Figure 2 depicts the general trends in marijuana use among total samples in 1975, 1978, and 1981. An overall decline in the number of marijuana users is portrayed in the graph. Actual data in Table XVI indicate a large increase between 1975 and 1981 in the percentages of 8th grade (6%), 10th grade (7.5%) and 12th grade (11.5%) students who reported themselves to be nonusers of marijuana. The graph also illustrates the decline in the number of regular and heavy users of marijuana.

Table XV
Age of Onset for Marijuana Use by Grade Levels

	Never Tried Marijuana	Tried Marijuana by age 12	Tried Marijuana by age 14	Tried Marijuana by age 16	Tried Marijuana by age 18
Grade 6	96.4	3.3 (3.5)			
Grade 8	86.4	8.5	13.0 (13.5)		
Grade 10	70.7	7.7	22.9	28.7 (29.2)	
Grade 12	55.8	5.5	19.9	38.5	43.9 (44.2)

*Numbers in parentheses include the response "Don't remember"

Table XVI
Percentages of Grade Level Samples Reporting Marijuana Use in 1975, 1978, and 1981

		Total	6th Grade	8th Grade	10th Grade	12th Grade
Nonuse	1975	83.5	98.2	87.2	77.5	66.3
	1978	84.5	99.3	89.6	78.1	72.7
	1981	89.1	98.4	93.3	84.9	77.8
Casual	1975	7.4	1.6	6.7	11.0	13.0
	1978	4.6	.6	3.3	5.4	8.4
	1981	4.0	.7	2.7	5.8	7.7
Regular	1975	3.9	.1	3.5	5.8	7.4
	1978	4.7	0.0	4.6	6.5	6.7
	1981	2.8	.2	1.8	4.9	4.9
Heavy	1975	5.1	.1	2.6	6.7	13.4
	1978	6.2	.1	2.6	10.1	12.0
	1981	4.0	.6	2.2	4.4	9.7

Marijuana use patterns by male and female students are depicted in Table XVII. Few differences between males and females in marijuana use patterns were manifest in the data. Female students were somewhat more likely to be nonusers of marijuana. Male students were more often represented in the heavy use category. A decrease in the casual, regular, and heavy use of marijuana by both sexes was disclosed by comparing the years 1975, 1978, and 1981. The percentages of nonusers among male and female samples declined between 1975 and 1981; female nonusers declined by 5% and male nonusers declined by 2%.

Differences in marijuana use patterns by school district categories are exhibited in Table XVIII.

The 1981 data denoted some marked differences in marijuana use among the four categories of school districts. An overall pattern was evident in which marijuana use became less frequent with each decrease in the size of school districts/communities. Urban schools exhibited a greater number of students who fit the casual, regular, and heavy users of marijuana categories than did school districts in the other categories.

When data from 1975, 1978, and 1981 were compared, all categories of school districts demonstrated a decline in the casual, regular, and heavy use of marijuana. Comparisons of data from 1978 with 1981 revealed that

Figure 2
Marijuana Use Among Total Samples
1975, 1978, and 1981

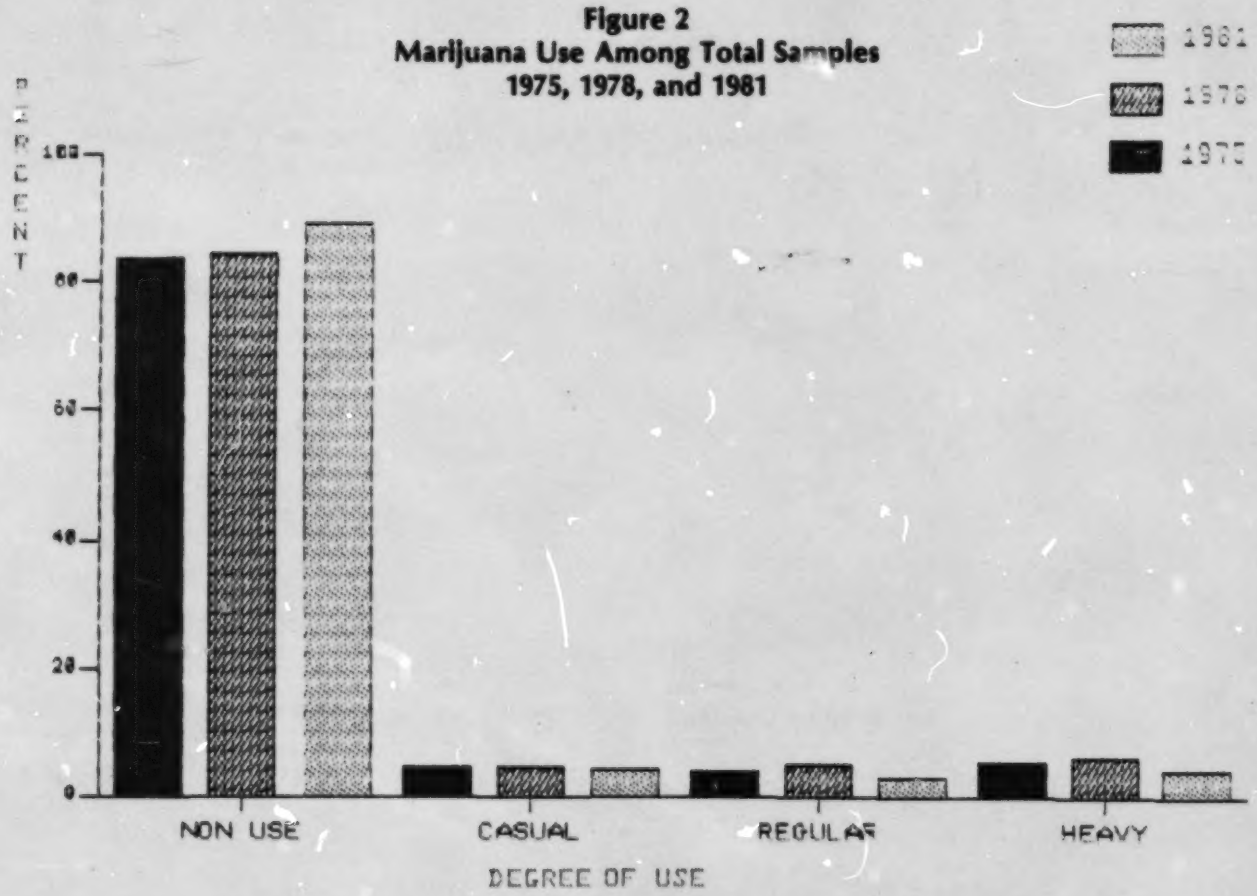


Table XVII
Percent Male and Female Reporting Marijuana Use in 1975, 1978, and 1981

		Nonuse	Ever Used	Casual	Regular	Heavy
Male	1975	80.8	*	9.0	4.3	6.0
	1978	84.0	24.3	4.8	4.3	7.0
	1981	78.7	21.3	4.1	3.5	5.7
Female	1975	86.3	*	5.9	3.5	4.3
	1978	84.9	20.3	4.4	5.1	5.6
	1981	81.1	18.9	4.8	3.3	2.7

*Unable to calculate due to wording of question in 1975

the largest decrease in casual use occurred in semiurban districts. The largest decrease in regular and heavy use occurred in urban districts. There was also a large decrease in the heavy use of marijuana among semiurban students.

Question 59 asked students "When you are 21 years old, how often do you think you will use marijuana?" Their responses are described in Table XIX.

Table XVIII
Percentages of Student Samples Reporting Marijuana Use by District Size in 1975, 1978, and 1981

		Urban	Semiurban	Semirural	Rural	Total Sample
Nonuse	1975	78.6	82.9	83.9	86.9	83.5
	1978	76.9	84.3	87.1	88.0	84.5
	1981	82.6	89.7	90.5	91.7	89.5
Casual	1975	9.8	6.7	6.3	6.7	7.4
	1978	5.4	5.9	4.1	3.8	4.6
	1981	5.8	3.5	4.2	3.2	3.9
Regular	1975	5.8	3.7	3.3	3.0	3.9
	1978	8.3	2.8	4.2	3.5	4.7
	1981	4.9	2.4	2.2	2.5	2.8
Heavy	1975	5.7	6.6	6.5	3.3	5.1
	1978	9.5	6.9	4.6	4.7	6.2
	1981	6.9	4.4	3.2	2.8	3.8

Approximately 89% of the students state that they did not intend to use marijuana by age 21. Almost 19% of the 12th grade students expected to use marijuana at 21 years of age. This data and the reported patterns of marijuana use in 1981 indicated that 12th grade students expected to reduce their casual and heavy use of marijuana by age 21.

Table XIX
Students' Intentions to Use Marijuana at Age 21

	6th Grade	8th Grade	10th Grade	12th Grade	Total Sample
I will not use marijuana	97.2	92.2	86.0	81.6 (77.8)	88.7
About once a month	1.6	4.0	5.9	8.0 (7.7)	5.0
About once each week	.6	1.1	3.1	3.2 (4.9)	2.1
About 2 or 3 times each week	.4	1.4	3.3	4.2 (3.1)	2.4
About every day	.3	1.4	1.9	3.2 (6.6)	1.8

*Numbers in parentheses represent percentages of the 12th grade sample reporting actual marijuana use

A summary of the relevant findings concerning marijuana use and nonuse includes:

- Evidently, the majority of students first tried marijuana between 13 and 16 years of age.
- Fewer students at each grade level had tried marijuana in 1981 as compared to 1978.

- The greatest increase in the casual and regular use of marijuana seemed to occur betweenn 8th and 10th grades.
- Students were using marijuana less frequently in 1981 as compared to 1975 and 1978.
- The largest decline in marijuana use occurred within the casual use category when 1975, 1978, and 1981 data were compared.
- Female and male students used marijuana at nearly the same frequency; males were slightly more likely to be heavy users.
- Casual, regular, and heavy marijuana use were more common among urban youth.
- Marijuana use has decreased in all four categories of school districts.
- Approximately 89% of the students in the 1981 study stated that they did not intend to use marijuana at age 21.

4. Other Drug Use and Nonuse

The age of onset for other drug use was assessed by asking students, "How old were you when you **first** tried drugs ('downers,' 'uppers,' and/or 'hallucinogens' like LSD)?" Student responses to this question are revealed in Table XX.

An overview of Table XX disclosed that a very small number (approximately 12%) of students have tried other drugs. Evidently the age range 13 to 16 was the period of greatest experimentation with other drugs. Only 6.8% of the total sample reported trying other drugs by age 12.

More 12th grade students have tried other drugs (21%) than had 12th grade students in 1975 (11%) and in 1978 (18%).

Table XX
Age of Onset for Other Drug Use by Grade Levels

	Never Tried Other Drugs	Tried Drugs by Age 12	Tried Drugs by Age 14	Tried Drugs by Age 16	Tried Drugs by Age 18
6th Grade	98.4	1.0 (1.6)			
8th Grade	94.4	2.7	5.1 (5.5)		
10th Grade	82.9	1.6	9.3	16.2 (17.0)	
12th Grade	79.1	.9	5.2	16.3	20.7 (20.9)

Frequency of other drug use was represented by student responses to the question, "During an average month, how often do you usually use any amount of drugs such as 'downers,' 'uppers,' or 'halucinogens'?" Table XXI presents the findings for this question.

The data in Table XXI indicated that very few students (approximately 6%) used other drugs. The frequency of other drug use increased with grade level; the greatest increase in use apparently occurred between 10th and 12th grade.

Comparisons of other drug use patterns in 1975, 1978, and 1981 revealed a paradox. The percentages of nonusers among students in 6th, 8th, 10th and 12th grades have increased in 1981 as compared with 1975. The percentages of 8th, 10th, and 12th grade students in 1981 who have ever used other drugs has increased over the 1978 sample.

An explanation for this paradoxical finding is that the number of students who have tried the other drugs and stopped has increased between 1978 and 1981. The percentages of grade level samples who reported "stopped using" other drugs in 1981 were .8% of sixth grade, 2.4% of eighth grade, 8.4% of 10th grade and 8.3% of 12th grade students. The percentages for these grade levels in the 1978 study were respectively .6%, 1.0%, 3.8%, and 6.0%.

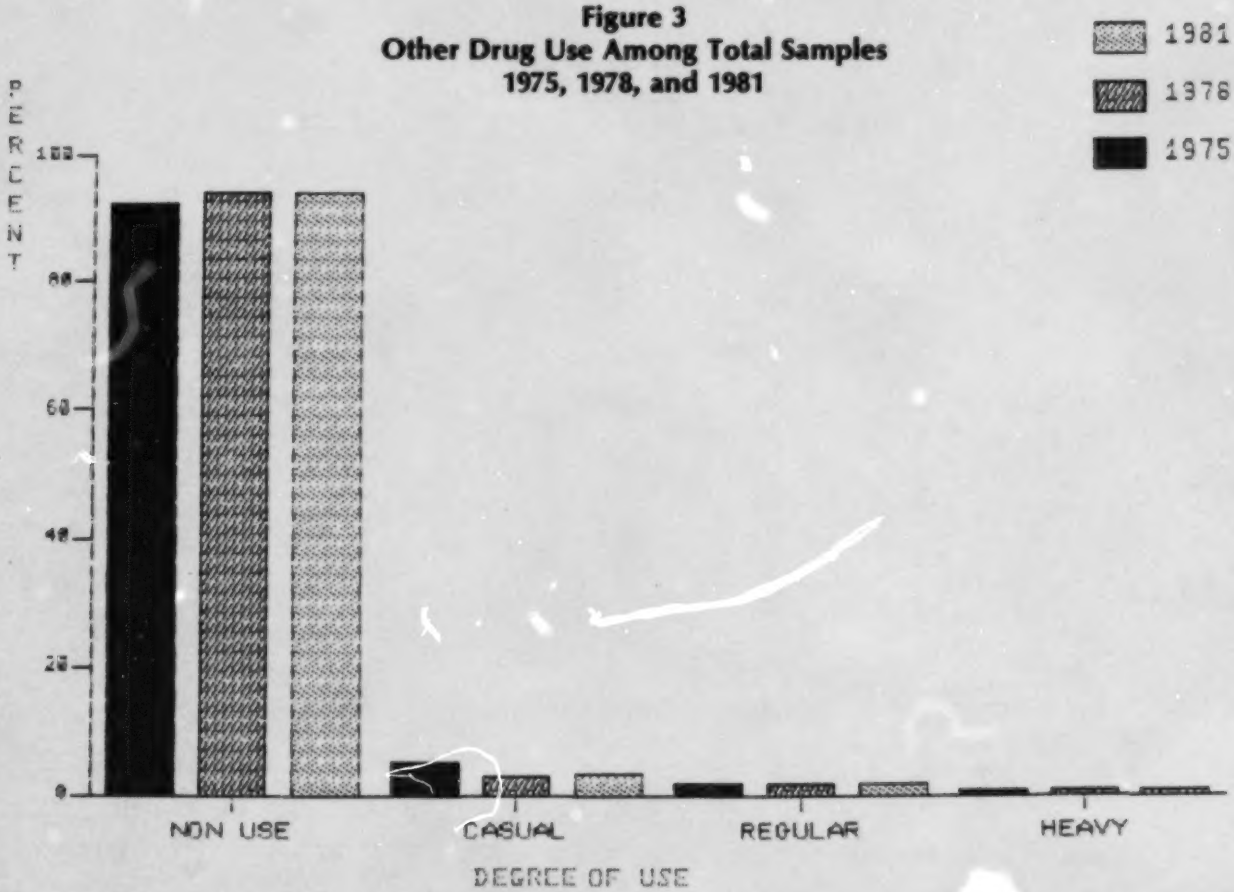
Most comparisons between use patterns and survey years revealed a trend toward less use of other drugs in 1981. Particularly notable was a decrease in casual use of other drugs at each grade level.

Table XXI
Percentages of Grade Level Samples Reporting Other Drug Use in 1975, 1978, and 1981

		Total	6th Grade	8th Grade	10th Grade	12th Grade
Nonuse	1975	92.3	98.5	95.6	89.1	83.1
	1978	94.2	98.9	97.7	90.2	90.1
	1981	94.3	99.4	96.9	92.4	87.2
Casual	1975	5.1	1.0	3.7	7.1	10.0
	1978	3.1	.9	1.2	4.6	5.9
	1981	3.2	.5	1.8	4.8	6.8
Regular	1975	2.0	.4	.5	2.9	4.9
	1978	2.0	.1	.9	3.7	3.5
	1981	1.7	.2	1.1	1.8	3.9
Heavy	1975	.6	.1	.2	.6	1.9
	1978	.6	0.0	.1	1.5	.5
	1981	.8	0.0	.3	1.0	2.1

Figure 3 illustrates the overall trends in other drug use during the years 1975, 1978, and 1981. The graph clearly portrays the small number of students who reported themselves to be users of other drugs.

Figure 3
Other Drug Use Among Total Samples 1975, 1978, and 1981



Data in Table XXII imply that few differences in drug use patterns for female and male students existed in 1981. Male and female use patterns for the other drugs were almost identical.

Table XXIII revealed very little difference between urban, semiurban and semirural and rural school districts in the percentages of students using other drugs in 1981. Urban schools seemed to have the highest percentage of casual users while semiurban schools had the highest percentage of regular users of other drugs.

Comparisons between district categories and use patterns implied a general decrease in the casual and regular use of drugs (1975 vs. 1981). The heavy use of drugs has remained as a very small percentage of student samples over the three study years.

Table XXII
Percent Male and Female Reporting Other Drug Use in 1975, 1978, and 1981

		Nonuse	Ever Used	Casual	Regular	Heavy
Male	1975	92.1	•	5.8	1.6	.5
	1978	94.4	10.3	3.3	1.9	.5
	1981	88.3	11.7	3.8	2.0	1.0
Female	1975	92.5	•	4.4	2.3	.8
	1978	94.1	9.4	2.9	2.2	.8
	1981	88.6	11.4	3.6	1.5	1.0

•Unable to calculate due to wording of question in 1975

Table XXIII
Percentages of Student Samples Reporting Drug Use By District Size in 1975, 1978, and 1981

		Urban	Semiurban	Semirural	Rural	Total Sample
Nonuse	1975	91.7	91.2	92.0	93.4	92.3
	1978	94.2	94.1	95.5	93.7	94.2
	1981	93.2	94.0	94.9	94.6	94.2
Casual	1975	6.0	5.9	5.0	4.1	5.1
	1978	3.3	2.5	2.8	3.3	3.1
	1981	4.5	3.5	3.2	2.7	3.2
Regular	1975	1.6	2.4	2.2	1.8	2.0
	1978	1.6	2.5	1.1	2.6	2.0
	1981	1.8	2.1	1.3	1.7	1.7
Heavy	1975	.7	.6	.9	.6	.6
	1978	.8	.8	.6	.5	.6
	1981	.6	.6	.7	1.2	.9

Summary for Other Drugs

The data regarding other drug use and nonuse suggested that the following summary was valid:

- Very few (12%) youth had tried the other drugs and very few (6%) continued to use them.
- The greatest amount of experimentation with other drugs appeared to occur between 13 and 16 years of age.

- More students had tried the other drugs in 1981 than had students in 1975 and 1978.
- The largest increase in the number of other drug users occurred between 10th and 12th grade.
- Patterns for other drug use were nearly identical for female and male students.
- Very few differences in drug use patterns were apparent among the four categories of school districts.
- A very small percentage (1%) of each student sample fit the heavy use pattern for other drugs.

5. Polysubstance Use and Nonuse

Previous reports of youth surveys conducted by the Iowa Department of Public Instruction have not included polysubstance use data. Such data provide a perspective on the number of students who use two or more substances over a given period of time.

The data in this section of the report represent the percentages of grade level samples and total samples which reported nonuse (never and stopped) and use (casual, regular, and heavy) of alcohol, marijuana, and other drugs. The computer sorted data and counted frequencies according to the following schema:

Nonuse of any substance (alcohol, marijuana, and other drugs)
Alcohol use only (nonuse of marijuana and other drugs)
Marijuana use only (nonuse of alcohol and other drugs)
Drugs only (nonuse of alcohol and marijuana)
Alcohol and marijuana use (nonuse of other drugs)
Alcohol and other drug use (nonuse of marijuana)
Marijuana and other drug use (nonuse of alcohol)
Use of all substances.

There were eight possible categories for the polysubstance analyses. Very few students fit the "drug only" and "marijuana and other drugs" categories, so these data were omitted from the tables.

An illustration for interpreting the data in Table XXIV is as follows: among 12th grade students; 20.5% did not use any of the substances, 60% used alcohol only, 11% used alcohol and marijuana only, and 10.5% used all substances.

The data in Table XXIV describe polysubstance use by grade levels in 1981. The percentage of students who reported nonuse of any substance decreased from 72% in 6th grade to 20.5% in 12th grade. "Alcohol only" accounted for the largest groups of substance users in each grade level. Very few students at any grade level fit the categories of marijuana use only or drug use only. The most frequently reported substance use combination was "alcohol and marijuana" followed closely by the "use of all substances".

Table XXIV
Polysubstance Use in 1981 by Grade Level

	Nonuse Of Any	Alcohol Only	Marijuana Only	Alcohol and Marijuana	Alcohol and Other Drugs	Use of All Substances
6th Grade	73.0	25.0	.3	1.1	.3	.1
8th Grade	52.6	40.5	.5	3.3	.6	2.6
10th Grade	32.4	50.0	.3	8.9	1.3	6.9
12th Grade	20.5	55.9	.4	11.0	1.4	10.4

Polysubstance use within total samples is presented for 1975, 1978, and 1981 in Table XXV. The 1981 data demonstrated an increase in the number of students who were nonusers of any substance. In 1981 data, there appeared to be a decrease in the number of students who were either alcohol and marijuana users or users of all substances. There were no changes in the alcohol-only use category between 1981 and previous years. Evidently, Iowa youth have decreased their polysubstance use without increasing their alcohol-only use.

A consistent pattern in polysubstance use is evident in Table XXVI. Polysubstance use was most common among urban schools as compared to the other three categories of school districts. The combined use of substances seemed to decrease in frequency as school districts/communities became more rural.

Table XXV
Polysubstance Use Among Total Samples During 1975, 1978 and 1981

	Nonuse Of Any	Alcohol Only	Marijuana Only	Alcohol and Marijuana	Alcohol and Other Drugs	Use of All Substances
1981	44.9	43.7	.3	5.4	.9	4.7
1978	31.1	44.0	.9	14.9	.5	8.5
1975	39.1	43.7	.3	9.3	.7	6.7

The use of alcohol only seemed to increase with a decrease in school/community population. The use patterns of marijuana only, drug only, and marijuana and other drugs were insignificant regardless of school district size. Approximately 5% of all students in the 1981 study reported using all substances.

Table XXVI
Polysubstance Use Within Various Sized School Districts in 1981

	Nonuse of Any	Alcohol Only	Marijuana Only	Alcohol and Marijuana	Alcohol and Other Drugs	Use of All Substances
Urban	42.6	37.6	1.0	10.8	1.1	6.8
Semiurban	43.2	41.7	.4	7.1	1.4	6.0
Semirural	44.0	45.7	.1	5.1	.7	4.5
Rural	43.5	47.7	.1	3.6	.8	4.2

Finally, comparisons between alcohol and tobacco use patterns were computed with 1981 data. The data in Table XXVII represent such comparisons. Approximately 45% of the entire 1981 youth sample were both nonusers of alcohol and nonusers of tobacco. Nearly 13% of the total sample were users of both tobacco and alcohol. There appeared to be a strong association between regular/heavy use of alcohol and regular/heavy use of tobacco (6.5% of total sample).

Table XXVII
Comparisons of Alcohol and Tobacco Use Patterns in 1981

	Nonuse of Tobacco	Casual Use of Tobacco	Regular Use of Tobacco	Heavy Use of Tobacco
Nonuse of Alcohol	45.0	1.0	0.0	0.0
Casual Use of Alcohol	23.0	1.5	.5	1.0
Regular Use of Alcohol	15.5	2.5	1.0	3.0
Heavy Use of Alcohol	3.0	1.0	0.5	2.0

6. Summary of Findings for Substance Use and Nonuse

Detailed summaries regarding the use and nonuse of each specific substance were presented in earlier sections. Some very broad observations are reported here:

- The frequency of substance use appeared to be a function of age. Substance use apperaed to increase in frequency with each increase in age.
- Intent to use substances as an adult seemed to increase with each increase in grade level.
- The substance use patterns of female and male students were very similar.
- The age of onset data for 12th grade students indicated that a ranking of substances by "ever tried" was plausible. For 12th grade students, 94% had tried alcohol, 72% had tried tobacco, 44% had tried marijuana, and 21% had tried other drugs.
- Comparisons of use data between different categories of school districts suggested that substance availability and anonymity of use were important factors. For example, marijuana use and polysubstance use were most frequent within urban districts and least frequent in rural districts. "Alcohol-only" use was more frequent in rural districts than it was in urban districts. Tobacco use was slightly more frequent in rural districts than it was in urban districts.

IV. Influencers of Substance Use and Nonuse Behaviors

A series of six questions (t[illegible]provided a broad perspective regarding external sources of influence on youth substance use and nonuse decisions. Student responses on these questions are presented first as background for the more specific findings concerning the influence of family, peers, and schools on youth substance decisions.

Questions 62-65 asked students to identify the persons who had **most** influenced their decisions to not use substances. Students responded to the question, "Who, on the following list of people, have most influenced your decisions to **not** use alcohol, tobacco, marijuana, or other drugs?" Data in Table XXVIII represent percentages of the **nonuser** groups who matched a specific person with the nonuse of a specific substance.

Among **nonusers** of substances, parents (56%-66%) were perceived to exert the most influence on substance decisions. The second, third, and fourth most important sources of influence appeared to be friends, health teachers, and siblings. School nurses and school counselors seemed to exert the least influence.

The data in Table XXVIII did not suggest a specificity for "influencers." Parents were consistently perceived as the most important source of influence to not use alcohol, tobacco, marijuana, and other drugs. Friends, health teachers, and siblings also were perceived to have a consistent and general influence regardless of substance.

The data from questions 62-65 were also clustered by grade levels. Comparisons of sixth grade responses with twelfth grade responses indicated that school nurses, school counselors, health teachers, policemen, and counselors from an alcoholism/drug treatment center all decreased in their influence on students' nonuse of substances. Parent influence remained high and consistent across grade levels. Only the percentage of students selecting peer influence increased with each increase in grade level. Apparently, peers did exert a recognized influence on the nonuse of alcohol, marijuana, tobacco, and other drugs.

Question 66 attempted to assess a less direct source of influence, namely the credibility of information sources. Table XXIX describes student responses to the question "Where did you get the information which is most important to you about alcohol and other drugs?"

Students ascribed the most importance to substance information they received from parents, school teachers, and friends. This ranking matched the ranking for perceived influences as reported in Table XXVIII. Similar data comparisons could be made between the rankings for siblings, counselors from an alcoholism/drug treatment center, police, and school counselors in both tables. Police and school counselors were least often selected on both questions.

Some grade level trends were apparent in Table XXIX. Parents and classroom teachers became less important sources of information with each increase in grade level. There was an increase in the perceived importance of information attributed to friends, substance users, and personal experience with each increase in grade level.

The importance of media sources of information was also indicated in Table XXIX. Print and broadcast media were slightly less often chosen as important sources of information than were parents.

Table XXVIII
Perceived Influences on Substance Nonuse Decisions in 1981

	To Not Use Alcohol	To Not Use Tobacco	To Not Use Marijuana	To Not Use Other Drugs
Your parents	66.0	61.0	62.0	56.0
Your friends	9.0	13.0	13.0	13.0
A health teacher	7.5	11.0	8.0	10.0
Your brother/sister	4.5	7.0	6.0	5.0
A counselor from an alcohol drug treatment center	5.0	2.0	3.5	7.0
A minister, priest, or rabbi	2.5	2.0	1.5	2.5
A policeman	2.5	.5	3.0	2.5
A school nurse	2.0	2.5	1.0	1.5
A school counselor	1.5	1.5	1.5	2.0
Percent Total Sample Nonusers	46.0	67.0	89.0	94.0

Table XXIX
Most Important Source of Information About Substances (Percent of Grade Level Samples)

	6th Grade	8th Grade	10th Grade	12th Grade	Total Sample
Talking with parents	28.0	21.0	17.0	12.0	20.0
School classroom teacher	12.0	13.0	10.0	9.0	11.0
Friends	7.0	11.0	15.0	17.0	12.0
Someone who is now using alcohol or drugs	3.0	6.0	9.0	9.0	6.5
Personal experience	2.0	3.5	8.5	13.0	6.5
Brothers or sisters	5.5	6.0	5.5	5.5	5.5
Counselor from an alcoholism/drug treatment center	4.5	5.0	4.0	4.0	4.0
School assembly	4.0	4.5	4.0	3.0	4.0
Police or other law enforcement person	4.5	2.5	2.5	1.5	3.0
School counselor	2.5	2.0	1.0	.5	1.5
Books, magazines, or pamphlets	13.0	15.0	15.0	17.0	15.0
TV or radio	13.0	11.0	9.0	9.0	11.0

Table XXX reports data relevant to trust in communications about substances. The question read, "If you had a problem with alcohol or other drugs and you wanted to talk with someone about it, where would you most likely go for help?"

A close friend and parents were most often chosen as sources of help for a substance problem. A close friend became a more frequently chosen source of help with each increase in grade level. The opposite trend was indicated for parents/guardians. "Don't know where I would go," was consistently the third listing most often chosen. School persons consistently ranked near the bottom of the list as possible sources of help.

One way to summarize the external influencers data is to compare total frequencies of selection for various persons. These comparisons suggested:

Parents consistently ranked first as influencers to not use substances and as the most important source of information. Parents ranked second to peers as a source of help.

Peers ranked third as influencers to not use substances, second as a source of information, and first as a source of help.

School persons (teacher, nurse, and counselor) ranked second as influencers to not use substances, third as a source of information, and seventh (out of nine choices) as a source of help.

Siblings ranked fourth as influencers to not use substances, sixth as a source of information, and fifth as a source of help.

The remainder of this part of the report describes findings related to parent influence, peer influence, and school influence on youth substance decisions.

Table XXX
Perceived Sources of Help
for Substance Problem
by Grade Level

	6th Grade	8th Grade	10th Grade	12th Grade	Total Sample
A close friend	27.5	37.5	43.5	50.0	39.0
Parents or guardian	33.0	19.0	17.5	12.0	21.0
Don't know where I would go	11.5	13.5	12.0	10.0	11.5
A crisis line or drug and/or alcohol treatment center	10.5	9.5	6.5	8.0	9.0
Brother, sister, or other young relative	4.5	7.5	9.5	8.5	7.5
A trusted adult (not mentioned above)	3.0	4.5	6.0	6.0	5.0
A school counselor or teacher	3.0	5.0	3.0	2.5	3.5
Minister, priest, rabbi	3.5	2.5	2.5	2.0	2.5
Our family doctor	3.5	1.0	1.0	1.0	1.5

1. Parent Influence

Several questions in the survey were related to parental influence on student substance use or nonuse. For convenience, data have been organized according to parent attitudes toward alcohol and marijuana (questions 8 and 9); parent guidelines regarding youth's use of alcohol, tobacco, and marijuana (questions 10-12); and parent models of alcohol and tobacco use (questions 107-110). The data report is descriptive, and no attempt has been made to identify correlations between these items and student use or nonuse behaviors.

Questions 8 and 9 asked students to assess their parents' attitudes toward alcohol and marijuana. Students responded to the questions:

"Would your parents/guardians agree or disagree with this statement about alcohol?" Frequent use of alcohol can cause serious physical and psychological harm."

"Would your parents/guardians agree or disagree with this statement about marijuana?" Frequent use of marijuana can cause serious physical and psychological harm."

Data in Table XXXI indicate that a large majority of youth perceived that their parents believe alcohol and marijuana use can be harmful. Students prceived their parents to have particularly strong negative attitudes toward marijuana. Only 7% of the students reported proalcohol views and only 6% of the students reported promarijuana views for their parents. Fourteen percent of the students disclosed that they did not know what their parents' attitudes toward alcohol were. Slightly more than 5% of the students did not know what their parents' attitudes toward marijuana were.

Table XXXI
Parental Attitudes
Toward Alcohol and Marijuana

	Parent Alcohol Attitudes	Parent Marijuana Attitudes
Parents would strongly agree	36.5	68.9
Parents would agree	39.3	18.8
Parents would disagree	4.9	1.8
Parents would strongly disagree	2.2	4.0
Parents would not be sure	3.0	1.4
I don't know what their opinion would be	14.0	5.0

A series of three questions (10-12) asked students:

"What are your parents' feelings about your drinking?"

"What are your parents' feelings about your tobacco use?"

"What are your parents' feelings about your use of marijuana. . . pot, grass?"

Student responses to these questions are summarized in Table XXXII. The first row of data in the table indicates the percentage of the total sample which reported being nonusers of each of the substances. Data which appear in the remainder of the table are percentages computed on **user** responses. These data represented what users of alcohol, tobacco, and/or marijuana perceived to be their parents' guidelines for such use.

Approximately 33% of alcohol users, 31% of tobacco users and 60% of marijuana users reported that their parents did not know about the students' substance use. Another 8.5% to 14.5% of the users reported that they did not know how their parents felt about the student's substance use. The choices, "They know I use . . . but wish I did not" and "They think I drink/use . . . too much" were chosen by 29% of the alcohol users, 40% of the tobacco

users, and 21% of the marijuana users. They combined choices of "They know I drink/use . . . and don't care" and "They expect me to not get into trouble when I . . ." were selected by 24.5% of the alcohol users, 21% of the tobacco users, and 4.5% of the marijuana users.

The majority (61%) of tobacco users reported that their parents knew about this behavior. Nearly 54% of the alcohol users and 29% of the marijuana users reported that their parents knew about the substance use.

Table XXXII
Parental Guidelines for Student Substance Use
(Percent of User Samples)

	Parents' Feelings Alcohol	Parents' Feelings Tobacco	Parents' Feelings Marijuana
Percent of total sample nonuse	59.5	82.0	87.8
They don't know I drink/use. . .	32.5	31.0	60.0
They know I use . . . but wish I did not	27.5	36.0	18.0
They think I drink/use . . . too much	1.5	4.0	3.0
They know I drink/use. . . and don't care	5.5	15.5	1.5
They expect me to not get into trouble when I . . .	19.0	5.5	6.5
I don't know how they feel	14.5	8.5	11.0

Questions 107 and 108 asked students to estimate the frequency of parent tobacco use. Student responses to these questions were summarized in Table XXXIII. Also included in the table were data for the frequencies of tobacco use among the total 12th grade sample in 1981.

Some differences in tobacco use were notable from Table XXXIII. Students reported that their mothers were less frequent tobacco users than were their fathers. Fathers were more likely to have stopped smoking or to be heavy smokers than were mothers. These sex differences in tobacco use were less apparent among boys and girls in the 1981 data (see Table XII). The 1981 tobacco use patterns among 12th grade students were very similar to their mothers' use patterns.

Table XXXIII
Percentages of Total Sample Reporting
Parent Use of Tobacco

	Mother Question 108	Father Question 109	Mother Plus Father	Percentage of Grade 12 Reporting Use
Never	56.0	30.0	43.0	57.0
Stopped Smoking	11.0	19.0	15.5	19.0
1-6 times each week	5.5	8.5	7.0	6.0
7-25 times each week	5.0	8.0	6.5	3.5
4-10 times each day	10.0	13.0	11.5	7.5
More than 10 times each day	10.0	13.5	12.0	6.0
Parent not present in home	1.5	7.0	4.0	--

Questions 109 and 110 attempted to assess the frequency of alcohol use among parents. Student responses are reported in Table XXXIV.

Data in Table XXXIV implied that mothers were less frequent users of alcohol than were fathers. There was, however, a greater percentage of mothers who were occasional drinkers than appeared to be true of fathers. The data indicated that fathers were more likely to be regular and heavy users of alcohol. Youth alcohol use differed from their parents since use patterns among the total male sample and total female sample (see Table VII) were practically identical. Male students were similar to fathers in respect to heavy use patterns.

A comparison of 12th grade student data with parent alcohol data revealed some similarities and differences. Twelfth grade data were very similar to father data on "never drinks," "stopped drinking," and "few drinks each week." Student data were very similar to mother data on "occasionally drinks" and "two or more drinks each day."

Table XXXIV
Percentages of Total Sample
Reporting Parent Use of Alcohol

	Mother Question 110	Father Question 109	Mother Plus Father	Percentage of Grade 12 Reporting Use
Never drinks	28.5	13.0	20.5	11.5
Stopped drinking	4.0	6.0	5.0	8.0
Occasionally drinks	43.5	34.5	39.0	46.0
Few drinks each week	15.0	25.0	20.0	28.5
Two or more drinks each day	3.5	12.0	8.0	4.0
I don't know	3.0	2.5	2.6	--
Parent not present in home	1.5	7.0	4.3	--

2. Peer Influence

Questions regarding peer influence were prevalent throughout the youth survey instrument. Two sets of questions, however, were designed to assess peer modeling of substance use (questions 13-15) and peer norms/attitudes regarding substance use (questions 38-43). The first set of questions stated, "How many of your friends drink alcoholic beverages/smoke tobacco/smoke marijuana?" The second set of questions asked, "How do you think your close friends feel (or would feel) about you . . .?" in relationship to six common substance behaviors.

Student responses to questions 13-15 are depicted in Table XXXV. A general conclusion was evident from this peer use data: it became more and more likely that a student would encounter alcohol, tobacco, and marijuana use among his/her peers and close friends as the student moved to each progressively higher grade level. Evidently, by the time students reach 10th and 12th grades, they have associated with a number of classmates and friends who used one or more of the substances.

A closer inspection of the data for questions 13-15 revealed some grade levels at which exposure to peer substance use greatly increased. While 27% of 6th grade students reported that some of their friends used alcohol, nerly 68% of 8th grade students reported alcohol use among their friends. A similar comparison was possible for tobacco use between 6th grade students (17% reported tobacco use among friends) and 8th grade students (44% reported tobacco use among friends) and 8th grade students (44% reported tobacco use among friends). The largest increase in peer use of marijuana seemed to occur between 8th grade (27% reported marijuana use among friends) and 10th grade (46.5% reported marijuana use among their friends).

Data in Table XXXVI indicate what youth perceived to be approved/disapproved substance behaviors among their peers. When responses were compared for each question it appeared that, "Getting drunk once or twice each week" and "Smoking marijuana" were the most likely of the six substance behaviors to be approved by

peers. The least likely to be approved by peers was, "Trying another illegal drug such as cocaine and downers."

Grade level differences in peer approval and disapproval of substance use were also exhibited in Table XXXVI. Very few 6th grade students report that their peers would approve any of the six substance behaviors. Peer disapproval of any of the substance behaviors appeared to decrease with each increase in grade level. The greatest decrease in peer disapproval of marijuana use was evident between 8th and 10th grade. It looked as if peer disapproval of alcohol behaviors decreased most between 8th and 10th grade. While smoking tobacco and trying another illegal drug were consistently perceived to be disapproved behaviors, the greatest decrease in such disapproval occurred between 8th and 10th grade. A particularly salient finding from this data was that nearly 34% of 10th grade students and 46% of 12th grade students perceived that their peers would approve of getting drunk once or twice each week.

Table XXXV
Peer Use of Alcohol, Tobacco, and Marijuana in 1981

How many of your friends. . .		None	A few (one or two)	Some (three or four)	Many (five or more)
Question 13 drink alcoholic beverages?	Grade 6	73.0	18.5	4.5	4.0
	Grade 12	2.5	11.0	13.0	73.5
Question 14 smoke tobacco?	Grade 6	83.0	11.5	2.5	3.0
	Grade 12	22.0	31.0	19.0	28.0
Question 15 smoke marijuana?	Grade 6	91.5	6.5	1.0	1.0
	Grade 12	40.0	25.5	13.5	21.0

Table XXXVI
Peer Norms Regarding Substance Use
(Percentage of Grade Level Samples)

		6th Grade	8th Grade	10th Grade	12th Grade	Total
38 Smoking marijuana	Approve	4.0	10.0	23.0	30.0	18.0
	Disapprove	96.0	90.0	77.0	70.0	82.0
39 Smoking marijuana regularly (2 or more times each week)	Approve	3.0	7.0	15.0	21.0	11.0
	Disapprove	97.0	93.0	85.0	79.0	89.0
40 Taking 1-2 drinks nearly every day	Approve	10.0	18.0	23.0	26.0	20.0
	Disapprove	90.0	82.0	77.0	74.0	80.0
41 Getting drunk once or twice every week	Approve	4.0	15.0	34.0	46.0	26.0
	Disapprove	96.0	85.0	66.0	54.0	74.0
42 Smoking one or more packs of cigarettes each day	Approve	4.0	8.0	13.0	17.0	11.0
	Disapprove	96.0	92.0	87.0	83.0	89.0
43 Trying another illegal drug such as cocaine or downers	Approve	2.0	5.0	9.0	11.0	6.0
	Disapprove	98.0	95.0	91.0	89.0	4.0

3. School Influence

Students were asked five questions to assess the influence school substance education programs might have on substance behaviors. The first question in the series asked students, "Do you think that what you learned in school about alcohol, tobacco, and other drugs was useful to you?" Student responses by grade level are reported in Table XXXVII.

Approximately 85% of the students in the 1981 survey indicated that they felt the school substance education program was very useful or of some use to them. Conversely, 15% of the students thought the school program was of little use or a waste of time. School programs were rated favorably by 79% and unfavorably by 19% of the students in the 1978 youth survey. Tenth and 12th grade students rated school programs more favorably in 1981 than did those surveyed in 1978.

Table XXXVII
Student Ratings of School
Substance Education Programs

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Yes, very useful.	61.5	47.0	31.0	27.0	42.5
Yes, some use.	26.0	40.0	52.5	56.0	43.0
No, little use.	5.0	8.0	11.0	12.0	9.0
No, waste of time.	7.5	5.0	5.5	4.5	5.5

The data in Table XXXVIII represent a summary of student responses to questions 87-90 on the 1981 youth survey. The percentages in the table were based on total sample data. The column "over all substancces" was based on frequency counts for each respose choice across the four specific substance questions.

The six response choices for each of questions 87-90 reflected several types of influence school programs might exert. The choices, "decided to not use . . ." and "decided to stop using . . .", represented a direct positive influence of school programs. The choice, "already decided to not use . . .", represented an indirect positive influence of school programs; the program reinforced a preselected behavioral choice. The choices, "we have not talked about . . ." and "already decided to use", reflected a basically neutral position relative to program influence on substance behaviors. Finally, the choice, "decided to start or to use more . . .", was a negative influence of school programs. The findings on these questions were indicative of student perceptions of school program effects.

The data in Table XXXVIII implied that school programs exerted some unique influences on each of the specific substance behaviors. Acccording to student responses, school persons were most likely to discuss marijuana and other drugs in the classroom and least likely to discuss alcohol and tobacco. Students also indicated that very few of them had already chosen to use other drugs and marijuana. Conversely, a large group of students (36-38%) had already chosen to not use other drugs, marijuana, and tobacco. Very few students (1%) reported that school programs had influenced them to start using or to use more substances.

Apparently school programs have influenced a large number of students (32-45%) to not use substances. School programs appeared to exert the most positive influence on other drug and marijuana behaviors. A small percentage of students (2-5%) reported that school programs had influenced them to stop using substances.

Student responses on questions 87-90 were also clustered by grade levels. There were some obvious decrements in the percentage of students at each grade level who stated that the school program influenced them to not use substances:

- to not use alcohol . . . 6th grade 52% and 12th grade 12%
- to not use tobacco . . . 6th grade 51% and 12th grade 23%
- to not use marijuana . . . 6th grade 54% and 12th grade 28%
- to not use other drugs . . . 6th grade 54% and 12th grade 36%

Table XXXVIII
Perceived Impact of School Programs on Substance Behaviors for Total Sample

	Tobacco	Alcohol	Marijuana	Other Drugs	Over All Substances
Yes, decided to not use . . .	37.0	32.5	43.0	47.0	40.0
Yes, decided to stop using . . .	5.0	3.5	3.0	2.0	3.5
No, we have not talked about . . .	11.0	11.5	8.5	8.5	10.0
No, already decided not to use . . .	36.5	24.5	37.0	37.5	34.0
No, already decided to use . . .	9.5	27.0	8.0	4.5	12.0
No, decided to start or to use more . . .	.5	1.5	1.0	1.0	1.0

The percentages of grade level samples who reported "already decided to not use . . ." the various substances increased with grade level (except for alcohol). These grade level increments were illustrated as follows:

- prior decision to not use alcohol . . . 6th grade 27% and 12th grade 21%
- prior decision to not use tobacco . . . 6th grade 30% and 12th grade 45%
- prior decision to not use marijuana . . . 6th grade 30% and 12th grade 43%
- prior decision to not use other drugs . . . 6th grade 30% and 12th grade 46%

In general, school programs appeared to have the most positive influence on the "other drug" use of youth. School programs seemed to have moderately positive influence on tobacco and marijuana use and the least positive influence on alcohol use.

4. Summary of External Influence Findings

The following is an outline of some of the more salient findings regarding the external influencers of youth substance behaviors.

Parents

- Youth indicated that their parents were the most important source of influence on their substance nonuse decisions.
- Youth indicated that their parents were the most important source of substance information and their second most likely source of help.
- A large majority of youth perceived that their parents believed alcohol and marijuana to have harmful effects.
- Youth who are substance users apparently receive a number of "mixed messages" from their parents about such behaviors.
- Reported patterns of parent tobacco and alcohol use were very similar to the use patterns exhibited by 12th grade students.

Peers

- Youth disclosed that their peers were the third most important source of influence on their substance nonuse decisions.
- Youth indicated that their peers were their third most important source of substance information and their most likely source of help for a substance problem.
- It was very likely that youth would associate with some friends/peers who used alcohol, tobacco, and marijuana.
- Peer disapproval of some common alcohol, marijuana, and tobacco behaviors decreased in frequency with each increase in grade level.
- Nearly 46% of 12th grade students perceived that their peers would approve of "getting drunk once or twice each week".

Schools

- Youth indicated that school persons (teacher, nurse, counselor) were their second most important source of influence to not use substances.
- School persons were reported to be youth's second most important source of substance information and the seventh most likely source of help.
- School substance education programs were rated by 85% of the youth to be very useful or of some use.
- School programs were reported to have had a positive influence on students' nonuse of other drugs, tobacco, and marijuana.
- School programs were reported to have had the least positive influence on student alcohol use or nonuse.

Other

- Very few youth indicated that police and clergy had influenced their nonuse decisions.
- Police and clergy were seldom chosen as a source of help or as an important source of substance information.

V. Personal Variables

Several questions are clustered under the category of personal variables. These questions were included in the youth survey to assess some internal influences on substance use or nonuse behavior. The questions also fit the categories of adolescent preferences and adolescent norms. Specifically, personal variables included:

Attitudes toward substances and substance behaviors (questions 16-37)
Substance knowledge (questions 71-79)
Motives for not using substances (questions 44-46)
Motives for using substances (questions 47-49)
Decision-making styles (questions 67-70)
Behaviors Associated with nonuse (questions 72-97)
Behaviors Associated with use (questions 98-103)

The findings regarding personal variables are presented on the following pages. Results are reported according to the format: overview of personal variables, alcohol behaviors and personal variables, marijuana behaviors and personal variables, and other drug behaviors and personal variables.

The related behaviors section presents data relative to conforming and nonconforming behaviors. The last section presents a summary of the salient findings regarding personal variables.

1. Overview of Personal Variables

A set of questions (questions 44-46) asked students to identify what they thought were the two most important reasons for not using alcohol, not using marijuana, and not using other drugs. Each question had eight possible response choices. Four response choices appeared among the eight possible choices for each substance nonuse question. An additional group of four response choices overlapped with two of the substance nonuse questions. Table XXXIX illustrates the overlap between response choices for the three substance nonuse questions. The data are presented as percentages of the total 1981 sample.

The data in Table XXXIX indicate that the total sample most often chosen "... is dangerous to their physical or mental health" as the primary reason for not using alcohol (20%), marijuana (33.5%), and other drugs (31.5%). "They have better things to do," was the least frequently selected reason for not using alcohol (6%), marijuana (4.5%), and other drugs (5%). Evidently, the most important reason for not using alcohol was, "They might get into an accident and hurt someone." The response, "Their families disapprove," was selected fairly often as a reason for not using either alcohol or marijuana. Students also frequently chose, "It's part of dropping out of life..." as an important reason for not using marijuana or other drugs.

Table XXXIX
Overview of Motives for Not Using Substances
Percentages of Total Sample

	Not Using Alcohol	Not Using Marijuana	Not Using Other Drugs
They have better things to do	6.0	4.5	5.0
They don't like the way it makes them feel or behave	9.0	7.0	7.0
It's against their personal or religious beliefs	9.5	8.0	7.0
is dangerous to their physical or mental health	20.0	33.5	31.5
There are too many risks of trouble with the police, employers, or school people	12.0	16.5	11.5
Their families disapprove	13.5	10.5	---
They don't like the people who use it	---	7.0	4.0
It's part of dropping out of life, something they don't want to do	---	13.0	10.5
They might become an alcoholic addicted to the other drugs	8.5	---	24.0
They might get into an accident and hurt someone	21.0	---	---

Response choices for questions 47-49 are described in Table XL. These response choices represented important reasons for using alcohol, marijuana, and other drugs. Four response choices (reasons for using) were repeated in each of the three questions. Another set of four response choices overlapped with two questions. Each substance use question had seven possible responses from which to select.

Data in Table XL implied that students considered "Because their (families and) friends use . . ." to be a major reason for using alcohol (13%), marijuana (23%), and other drugs (19%). The least frequently selected reason for using alcohol, marijuana, and other drugs was "Because they don't have anything else to do." The response choice, "They like the way___ makes them feel," was a frequently selected reason for using alcohol, marijuana, and other drugs. Students seemed to consider "To forget about their problems or unhappiness" to be an important reason for using either alcohol or marijuana. The most often selected reason for using other drugs was "to deal with the stresses and pressures of everyday life."

When Tables XXXIX and XL were compared some findings were evident. A greater number of students perceived positive feelings to be derived from substance use than perceived negative affective consequences of substance use. Students perceived positive social sanctions ("Because their families/friends use" and "To have a good time with people") to be associated with the use of alcohol and/or marijuana.

Table XL
Overview of Motives for Using Substances
Percentages of Total Sample

	For Using Alcohol	For Using Marijuana	For Using Other Drugs
They like the way___ makes them feel	16.5	18.0	16.5
Because they don't have anything else to do	2.5	1.5	2.0
They don't see anything wrong with	16.5	8.0	8.0
Because their (families and) friends use	12.5	22.5	19.0
To have a good time with people	19.0	8.5	---
To forget about their problems or unhappiness	25.5	18.5	---
To feel more important and confident/better about themselves	8.0	---	10.0
It's part of trying new things (curiosity, adventure)	---	22.5	12.5
To deal with the stresses and pressures of everyday life	---	---	31.5

Several questions attempted to assess student attitudes toward substances (questions 30-37) and substance behaviors (questions 16-30). The data in Table XLI reflect some general attitudes students have toward substances (questions 32, 34, and 37 are reported on later pages). The data in Table XLII represents student attitudes toward sets of specific substance behaviors.

An overview of Table XLI revealed some patterns in the data. Approximately 94% of the students at each grade level agreed that people should learn about the harmful results of using substances. Nearly 83% of the students disagreed with the idea of wishing for a pill that would make one feel better. A large majority (72-89%) of students at each grade level agreed with the idea that one shouldn't take pills or drugs unless they are given by a physician. Differences among grade levels were evident in attitudes sampled in questions 33 and 35. A smaller number of students agreed with the statement, "Fewer people would use drugs if there were more drug arrests," with each increase in grade level. By 12th grade, fewer students agreed than disagreed with the "arrests" statement. As grade level increased, fewer students appeared to agree with the statement, "It is hard for a teen to say no when offered alcohol or marijuana."

Table XLI
General Student Attitudes Toward Substances
(Percent of Grade Level Samples)

		6th Grade	8th Grade	10th Grade	12th Grade	Total
30 I wish there were pills I could take to make me feel better when I get upset or afraid.	Agree	16.0	19.0	18.0	13.0	17.0
	Disagree	84.0	81.0	82.0	87.0	83.0
31 You shouldn't take any kind of pills or drugs unless your doctor gives them to you.	Agree	89.0	84.0	79.0	72.0	81.0
	Disagree	11.0	16.0	21.0	28.0	19.0
33 Fewer people would use drugs if there were more drug arrests.	Agree	71.0	64.0	51.0	47.0	59.0
	Disagree	29.0	36.0	49.0	53.0	41.0
It is hard for a teen to say no when offered alcohol or marijuana.	Agree	69.0	60.0	56.0	53.0	60.0
	Disagree	31.0	40.0	44.0	47.0	40.0
36 More people should learn about the harmful results of using alcohol, tobacco, and marijuana.	Agree	94.0	95.0	95.0	94.0	94.0
	Disagree	6.0	5.0	5.0	6.0	6.0

Student attitudes toward specific substance behaviors were sampled in questions 16-30. These questions were divided into sets as follows: alcohol behavior questions 16-21, smoking behavior questions 22-24, marijuana behavior questions 25-27, and instrumental behavior questions 28-30. Instrumental behaviors were defined as substance use for a specific purpose. Total frequencies for very bad/bad were tabulated as "con" data and total frequencies for Good/Very Good were tabulated as "pro" data for each set of substance behaviors (e.g., alcohol behaviors). These pro and con frequencies were computed as percentages of each grade level holding such attitudes for a specific set of substance use behaviors. These data are reported in Table XLII.

The general pattern suggested by the data in Table XLII was an increase in prosubstance attitudes with each increase in grade level. Another pattern was also exhibited in the table; alcohol and instrumental attitudes were very similar across all grade levels. For example, 44% of 12th grade students had proalcohol use attitudes and 46% of these students had proinstrumental use attitudes. Finally, attitudes toward marijuana use seemed to change the least when grade level percentages were compared.

Student responses to the instrumental use questions are exhibited in Table XLIII. Some patterns were evident in this attitudinal data. Students considered the use of birth control pills more favorably than the use of a drug to lose weight and the use of a drug to help a nervous person to relax. This difference in pro-use attitudes was most apparent at 10th and 12th grade. Pro-attitudes toward the use of a drug to relax and the use of a drug to lose weight were very comparable at each grade level.

The questions 71-84 attempted to sample student knowledge about substances and substance laws. Data in Table XLIV represent the percentage of students who correctly answered each question at each grade level. The topic of each question is described in the table. Questions 71-78 followed a multiple-choice format with four possible answers and the option to respond "I don't know." Questions 79-84 were true-false questions and also included the option "I don't know."

The data in Table XLIV described some patterns in student substance knowledge. Students were more likely to answer questions correctly with each increase in grade level. Of the multiple choice questions, students most frequently knew the correct response concerning "smoking and pregnancy" and "tolerance for a substance." Students were least often correct in answering the question about the legal level of alcohol intoxication. Student responses on the true-false questions revealed that they most often knew the correct answer to questions

concerning alcohol interactions with antihistamines and the harmful effects of marijuana use. A consistent 31-39% of the students provided the correct answers about caffeine effects.

Table XLII
Overview of Student Attitudes Towards Substances
Percentages of Total Sample

		6th Grade	8th Grade	10th Grade	12th Grade	Total
Alcohol	**Pro**	17.0	24.0	35.0	44.0	29.0
	Con	83.0	76.0	65.0	56.0	71.0
Marijuana	**Pro**	5.0	12.0	20.0	26.0	15.0
	Con	95.0	88.0	80.0	74.0	85.0
Instrumental	**Pro**	19.0	30.0	36.0	46.0	30.0
	Con	81.0	70.0	64.0	54.0	70.0
Combined	**Pro**	14.0	23.0	31.0	39.0	26.0
	Con	86.0	77.0	69.0	61.0	74.0

Table XLIII
Student Attitudes Toward Instrumental Substance Use
Percent of Grade Level Samples

		6th Grade	8th Grade	10th Grade	12th Grade	Total
28 Use of a drug to help a nervous person to relax.	**Good**	18.0	29.0	32.0	33.0	28.0
	Bad	82.0	71.0	68.0	67.0	72.0
29 Use of birth control pills.	**Good**	30.0	53.0	69.0	82.0	57.0
	Bad	70.0	47.0	31.0	18.0	43.0
30 Using a drug to lose weight.	**Good**	20.0	32.0	37.0	39.0	31.0
	Bad	80.0	68.0	63.0	61.0	69.0

The series of questions 67-70 were added to the 1981 survey in an attempt to assess decision-making styles relative to substance use issues. One question (67) dealt with peer influence to use marijuana. Two questions (68 and 69) dealt with peer influence to use alcohol. The final question presented students with an opportunity at "role-reversal"; they were to consider what actions they would take as a parent of a teen. The results of questions 67-69 are described in later sections of this report. The responses of students to question 70 are presented here as an overview of the decision-making styles of students in the 1981 survey.

Students were asked to identify one action out of eight possibilities that they would take in the following situation:

"Imagine that you are the parent of a 16-year-old daughter. Four years ago she was a bright, charming, creative child with good grades in school. During the last five years she had done poorly in school, gotten into trouble for shoplifting, and had been using alcohol and marijuana. As a parent, what would you likely do?"

Table XLIV
Substance Knowledge by Grade Level*
(Percent Correct)

	6th Grade	8th Grade	10th Grade	12th Grade	Total
71 Smoking and pregnancy	32.0	47.0	57.0	64.0	49.0
72 Alcohol is a depressant drug	8.0	15.0	31.0	48.0	24.0
73 Amphetamines and effects on heart	9.0	14.0	22.0	32.0	18.0
74 Barbituate and tranquilizer effects	7.0	20.0	37.0	45.0	26.0
75 Tolerance for a substance	16.0	40.0	59.0	70.0	45.0
76 Intoxification level	4.0	10.0	21.0	21.0	13.0
77 Drinking and drivig	18.0	30.0	56.0	67.0	42.0
78 Minor's consent for treatment	12.0	26.0	38.0	49.0	30.0
79 Implied consent law	34.0	42.0	55.0	66.0	49.0
80 Caffeine effects	39.0	36.0	31.0	31.0	35.0
81 Method to sober up	13.0	24.0	57.0	67.0	39.0
82 Alcohol metabolism	20.0	32.0	52.0	62.0	40.0
83 Interactions with alcohol	46.0	59.0	72.0	79.0	63.0
84 Harmful effects of marijuana	59.0	62.0	62.0	65.0	62.0

*Questions 71-78 were multiple choice questions with 5 possible choices and Questions 79-84 were true-false questions

Responses of students at each grade level are exhibited in Table XLV. The most frequently chosen response, regardless of grade level, was to "arrange some time for you and your daughter to sit down and talk about her behavior and your concerns." This response increased in frequency with each increase in grade level. The second most frequently selected response, regardless of grade level, was to "arrange a meeting with a counselor from an alcohol and drug agency for you and your daughter." This response was chosen by smaller percentages of students with each increase in grade level. The least frequently selected response across grade levels was to "do nothing and hope she will stop doing the unwanted behavior." As grade level increased, the response involving school counselors decreased in frequency of selection.

2. Alcohol Behaviors and Personal Variables

This section focuses on motives for not using and using alcohol, general attitudes toward alcohol, attitudes toward specific alcohol use behaviors, and decision making in two alcohol-use situations. The format of this section was designed to indicate how personal variables might affect alcohol use or nonuse.

Motives for not using alcohol were assessed through question 44, "Check what you think are the two most important reasons for people not drinking." The data in Table XLVI were arranged according to response frequencies for each of the eight possible choices. Also included in the table was a ranking based on 1978 student data for the same question.

The first and second most frequently chosen reasons for not using alcohol were "They might get into an accident . . ." and "alcohol is dangerous . . ." The two responses decreased in frequency of choice with each

Table XLV
Student Decisions Regarding Family Substance Problem
(Percent of Grade Level Samples)

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Schedule a meeting with your daughter's school counselor and discuss her behaviors	12.0	7.5	5.0	3.5	6.5
Do nothing and hope that she will stop doing the unwanted behaviors	1.0	1.5	1.5	1.0	1.0
Arrange a meeting with a counselor from an alcohol and drug agency	23.5	23.5	21.5	18.0	21.5
Offer your daughter some rewards like money, clothes, etc. if she stops	6.0	4.0	3.5	2.0	4.0
Arrange some time for you and your daughter to sit down and talk about her behavior	35.0	41.5	51.0	60.0	48.0
Tell your daughter that her behavior is intolerable and that she will have to leave	4.5	4.0	2.0	2.5	3.0
Establish some rules which forbid your daughter from going out with her friends	9.5	9.0	7.0	8.0	8.5
Send your daughter to a substance abuse treatment center	8.5	9.5	8.0	6.0	8.0

increase in grade level. The respose, "They might become an alcoholic," also decreased in frequency of choice with each increase in grade level. Three responses, "There are too many risks . . .," "Drinking is against their personal . . .," and "They don't like the way it makes them feel . . .," increased in frequency of choice with each increase in grade level. "Their families disapprove of drinking" remained fairly high in frequency of choice regardless of grade level. The first, second, and third most often selected reasons for not drinking changed when 6th and 12th grade data were compared. The first, second, and third most frequent choices of 6th grade students were ". . . accident and hurt someone," ". . . dangerous to . . . health," and "their families disapprove of drinking." For 12th grade students, the first, second, and third most frequently chosen responses were ". . . against personal or religious beliefs," ". . . accident and hurt someone," and "there are too many risks of trouble . . ."

Motives for using alcohol were sampled through question 47 "Check what you think are the two most important reasons for people drinking." The data in Table XLVII were listed according to the percentages of students selecting each of the seven possible responses. Included in the table were the rankings computed for 1978 data on the same question.

The two most frequently selected reasons for drinking were "To forget about their problems . . ." and "To have a good time with people," increased in frequency of choice. The third most frequently chosen reason, ". . . like way alcohol makes them feel," increased in frequency of selection with each increase in grade level. The choices, "don't see anything wrong . . ." and "Because their families and friends drink," were consistently chosen at similar frequencies regardless of grade level. The responses, "to feel more important and confident" and ". . . don't have anything else to do," were consistently chosen least often by students at each grade level. The first, second, and third most often selected reasons for drinking were similar in comparisons between grade levels and in comparisons with 1981 data. The exception to this observation was that in the 1982 survey, the reason, "To have a good time with people," increased in frequency of choice from 5th most often chosen at 6th grade to the most frequently chosen reason at 12th grade.

Table XLVI
Motives for Not Using Alcohol

	6th Grade	8th Grade	10th Grade	12th Grade	Total	Ranking in 1978
They might get into an accident and hurt someone.	27.0	22.5	18.0	16.0	21.0	1
Alcohol is dangerous to their physical or mental health.	24.5	24.0	14.0	13.0	20.0	2
Their families disapprove of drinking.	13.5	13.5	13.5	14.5	13.5	5
There are too many risks of trouble with police, employers, or school people.	9.0	11.0	14.0	15.0	12.0	3
Drinking is against their personal or religious beliefs.	3.0	5.5	12.5	17.5	9.5	8
They don't like the way it makes them feel or behave.	7.0	6.0	10.0	12.0	9.0	7
They might become an alcoholic.	10.5	10.5	7.5	4.5	8.5	6
They have better things to do.	.5	6.0	6.5	7.5	6.0	4

Table XLVII
Motives for Using Alcohol

	6th Grade	8th Grade	10th Grade	12th Grade	Total	Ranking in 1978
To forget about their problems or unhappiness	31.5	29.5	22.0	17.5	25.5	3
To have a good time with people	12.5	16.5	22.0	26.0	19.0	1
They like the way alcohol makes them feel	13.0	15.0	18.0	19.5	16.5	2
They don't see anything wrong with drinking	17.5	15.5	16.0	16.0	16.5	-
Because their families and friends drink	13.0	13.0	13.5	12.0	12.5	6
To feel more important and confident	9.0	8.5	8.0	6.5	8.0	4
Because they don't have anything else to do	3.5	2.5	1.5	2.5	2.5	5

Two questions (34 and 35) were designed to assess general student attitudes toward alcohol. Data in Table XLVIII revealed that most students (74-75%) disagreed with the statement "alcohol will help you to be more friendly and outgoing." The 19% of 10th grade and 26% of 12th grade students who agreed with this statement corresponded well with the 22% of 10th grade and 26% of 12th grade students who chose "to have a good time with people" as a most important reason for using alcohol.

A majority of students at each grade level agreed that "there is nothing wrong with drinking beer or wine." The percentage of students who agreed with the st tement decreased with each increase in grade level.

Table XLVIII
General Student Attitudes Toward Alcohol
(Percent of Grade Level Samples)

			6th Grade	8th Grade	10th Grade	12th Grade	Total
34	Alcohol will help you to be more friendly and outgoing.	Agree	5.0	11.0	19.0	26.0	14.0
		Disagree	95.0	89.0	81.0	74.0	86.0
35	There is nothing wrong with drinking beer or wine.	Agree	69.0	60.0	56.0	53.0	60.0
		Disagree	31.0	40.0	44.0	47.0	40.0

Questions 16-21 described some specific alcohol use and nonuse behaviors and asked students to judge whether they thought the behaviors were good or bad. Student responses to the series of questions are reported in Table XLIX. Large majorities of students indicated that they felt drinking and driving and drinking while pregnant were bad behaviors. Large percentages of each grade level considered refusing a drink at a party to be a good behavior. The greatest contrasts in grade level responses were to questions 17 and 20. Drinking several alcoholic beverages at a party was approved behavior among 13% of the 6th grade students and 67% of 12th grade students. Approximately 41% of the 6th grade students approved of drinking 2-3 alcoholic beverages after work while 66% of 12th grade students approved of the behavior.

Total XLIX
Student Attitudes Toward Specific Alcohol Behaviors
(Percent of Grade Level Samples)

			6th Grade	8th Grade	10th Grade	12th Grade	Total
16	Not accepting an alcoholic beverage at a party	Good	86.0	88.0	93.0	93.0	89.0
		Bad	14.0	12.0	7.0	7.0	11.0
17	Drinking several (three or more) alcoholic beverages at a party	Good	13.0	24.0	50.0	67.0	37.0
		Bad	87.0	76.0	50.0	33.0	63.0
18	Drinking alcoholic beverages before driving	Good	3.0	3.0	7.0	16.0	7.0
		Bad	97.0	97.0	93.0	84.0	93.0
19	Drinking two or three alcoholic beverages before driving	Good	4.0	5.0	12.0	20.0	10.0
		Bad	96.0	95.0	88.0	80.0	90.0
20	Drinking two or three alcoholic beverages at home to relax after work	Good	41.0	55.0	63.0	66.0	56.0
		Bad	59.0	45.0	37.0	34.0	44.0
20	A pregnant woman drinking two or three alcoholic beverages each day	Good	2.0	1.0	1.0	1.0	1.0
		Bad	98.0	99.0	99.0	99.0	99.0

Questions 68 and 69 presented two situations in which an alcohol use or nonuse decision was required. Students were instructed to select one response they were likely to make in each of the following:

"Imagine that you stopped at a friend's house after school. None of your friend's family are home. Your friend takes two cans of beer out of the refrigerator and offers you one. What are you likely to do?" (question 68)

"Imagine that you and your friends are planning what you are going to do before and after a school dance. Two of your friends suggest having a few drinks before the dance, and then after an hour at the dance, go to an apartment for a party. What are you likely to do?" (question 69)

Student responses to the beer-at-a-friend's-home question are recorded in Table L. Responses to the alcohol-and-friends'-plans situation are presented in Table LI.

With the exception of 6th graders, the students' most frequently selected (34-62%) response to the beer-at-a-friend's-house situation was to "take the can of beer and drink it." The second and third most frequently chosen responses were respectively to "refuse the can of beer, but stay there" and "refuse the beer and ask for a soft drink." Very few students at any grade level selected "Take the can of beer, but not drink it" and "Offer an excuse for not taking the beer." The least popular response was to "refuse the beer and threaten to tell your friend's parents." Aside from the 22% of 6th grade students, very few students chose the response of refusing the beer and going home.

Table L
Student Decisions Regarding Alcohol Use at Friend's Home

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Refuse the can of beer, but stay there.	17.0	20.5	19.5	18.0	18.5
Take the can of beer and drink it.	11.5	34.0	52.5	61.5	41.5
Take the can of beer, but not drink it.	4.0	4.0	2.5	1.5	3.0
Try to persuade your friend to not drink the beer.	22.5	11.5	6.5	3.0	10.0
Refuse the beer and go home.	22.0	8.0	4.0	2.0	8.5
Refuse the beer and threaten to tell your friend's parents.	2.5	.5	.5	0.0	1.0
Refuse the beer and ask for a soft drink.	15.5	14.5	11.5	12.0	13.5
Offer an excuse for not taking the beer ("I don't like the taste" or "Dad will be angry").	6.0	7.0	3.0	2.5	4.5

Several grade level differences were apparent in student responses to the friends, alcohol, and dance situation. Two responses which involved nondrinking modifications of the friends' plan were very infrequently chosen. Responses which required acquiescence to the friends' plan with limited drinking, were chosen by 14% of the 6th grade students and 33% of the 12th grade students. A response which totally rejected the friends' plan and drinking was chosen by 51% of 6th grade students and 16% of the 12th grade students. The percentage of students choosing to "go along with your friends' plan and get drunk" increased with each increase in grade level. The number of students who would choose to "go along with their friends but not drink" decreased from 15% of 6th grade students to 8.5% of 12th grade students.

Table LI
Student Decisions Regarding Alcohol Use in Group Situations

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Refuse to go along with their plans, but go to the dance with your date.	50.5	38.0	25.0	16.0	31.0
Go along with your friends' plan and get drunk.	3.0	11.0	24.0	32.0	18.5
Have a few drinks with your friends before the dance and then remain at the dance.	2.5	6.0	6.5	6.5	5.5
Refuse to drink before the dance but go to the party and limit your drinking.	8.5	11.5	10.5	11.5	10.5
Offer to host a nondrinking party at your home after the dance.	7.0	2.0	1.5	.5	2.5
Go along with your friends' plan, but limit the number of drinks you have.	5.0	10.0	18.0	21.0	14.0
Propose a nondrinking plan for the evening.	9.0	7.0	5.0	4.0	6.0
Go along with your friends but not drink.	15.0	14.5	9.5	8.5	11.5

3. Marijuana Behaviors and Personal Variables

Included in this section are data relevant to motives for not using and using marijuana, general attitudes toward marijuana, attitudes toward specific marijuana use or nonuse behaviors, and decision making in one marijuana use situation. This section describes some personal variables which might be related to marijuana use and nonuse.

Nonuse motives were assessed through student responses to question 45: "Check what you think are the two most important reasons for people not using marijuana (pot, grass)." Students could select two responses from a list of eight possible resposes. Response patterns to this question are reported in Table LII.

The most frequently selected (27-38%) reason for not using marijuana was observed to be "... is dangerous to their physical or mental health." The second most frequently chosen reason for nonuse was "... to many risks of trouble . . ." The third most frequently selected reason for nonuse was "it's part of dropping out of life. . ." Comparisons between grade levels indicated that the percentages of students who chose the "danger to health", "risks of trouble", and "dropping out" reasons decreased with each increase in grade level. Apparently, "families would disapprove" and "use is against personal or religious beliefs" became more important reasons for not using marijuana with each increase in grade level. Three reasons for not using marijuana ("don't like way it makes them feel . . .," "don't like the people who use it," and "... better things to do") were selected least frequently by students regardless of grade level. Very few differences were observed between grade levels on their first through fourth most frequently chosen reasons for not using marijuana. The exception to this statement is the apparent increase from 3.5% of 6th grade students to 14.5% of 12th grade students who selected the nonuse reason: "Marijuana use is against their personal or religious beliefs."

Table LII
Motives for Not Using Marijuana

	6th Grade	8th Grade	10th Grade	12th Grade	Total	Ranking in 1978
Marijuana is dangerous to their physical or mental health.	37.5	36.5	31.5	27.0	33.5	1
There are too many risks of trouble with the police, employers, or school people.	17.5	17.5	16.5	14.0	16.5	4
It's part of dropping out of life, something they don't want to do.	15.0	13.0	11.5	11.5	13.0	3
Their families would disapprove.	9.5	11.0	10.5	11.5	10.5	2
Marijuana use is against their personal or religious beliefs.	3.5	5.5	10.0	14.5	8.0	7
They don't like the way it makes them feel or behave.	7.5	6.0	7.5	8.0	7.0	6
They don't like the people who use it.	5.5	5.5	7.5	8.5	7.0	8
They have better things to do.	4.0	5.0	5.0	5.0	4.5	5

Motives for using marijuana were identified through question 48: "Check what you think are the two most important reasons for people using marijuana (pot, grass)." The data in Table LIII were listed by the frequency of choice for seven possible responses. Included in the table were the rankings for each response in the 1978 study.

The data in Table LIII disclosed very consistent findings across grade levels for each of the seven reasons for using marijuana. Very similar percentages (21-25%) of each grade level sample selected "it's part of trying new things" and "because their friends use marijuana" as the most important reasons for using marijuana. The reason for use, "to forget about their problems . . .," decreased in frequency of choice with each increase in grade level. The response, "like the way marijuana makes them feel," increased in frequency of selection with each increase in grade level. The least frequently chosen reason for using marijuana was "because they don't have anything else to do."

Only one question was included in the survey to assess general attitudes toward marijuana. Student responses to this question are reported in Table LIV.

The data in Table LIV revealed a large difference between 6th and 12th grade students in their attitudes toward experimentation with marijuana. Nearly half of the 12th grade students agreed with the statement.

Three questions described some common marijuana behaviors. Students were asked to judge each behavior to be either good or bad. The findings for these attitudinal questions are reported in Table LV.

Very few students (1-9%) judged "using marijuana everyday" to be a good behavior. "Smoking marijuana at a party" and "using marijuana to relax" were found to evoke very similar response patterns at each grade level. There were also some similarities between motives for using marijuana and two of the marijuana attitudes questions. For example, among 12th grade students 27% considered smoking marijuana at a party to be a good behavior and 21% of these students perceived "Because their friends use marijuana" to be a very important reason for using marijuana. Another example among 12th grade students was the similarity between the 23% who considered "using marijuana to relax" to be a good behavior and the 22% who selected "They like the way marijuana makes them feel" as a most important reason for using marijuana.

Question 67 in the survey dealt with peer influence to use marijuana. Specifically, the question was: "What would you do if your friends began smoking marijuana and they kept pressuring you to smoke with them?" Students were provided with eight response possibilities for this question. Data for question 67 are reported in Table LVI.

Table LIII
Motives for Using Marijuana

	6th Grade	8th Grade	10th Grade	12th Grade	Total	Ranking in 1978
It's part of trying new things (curiosity, adventure)	22.0	22.5	22.5	23.5	22.5	3
Because their friends use marijuana	22.5	25.0	22.0	21.0	22.5	6
To forget about their problems or unhappiness	23.5	21.5	16.0	13.0	18.5	4
They like the way marijuana makes them feel	13.0	16.5	20.0	22.0	18.0	-
To have a good time with people	8.0	7.5	9.5	9.5	8.5	2
They don't see anything wrong with using marijuana	8.0	5.5	9.0	9.5	8.0	1
Because they don't have anything else to do	2.5	1.5	1.5	1.5	1.5	5

Table LIV
Students' General Attitude Toward Marijuana

		6th Grade	8th Grade	10th Grade	12th Grade	Total
32 There is no harm in taking marijuana once or twice to find out what it is like	Agree	12.0	24.0	34.0	45.0	28.0
	Disagree	88.0	76.0	66.0	55.0	72.0

Table LV
Student Attitudes Toward Marijuana Behavior
(Percent of Grade Level Samples)

		6th Grade	8th Grade	10th Grade	12th Grade	Total
25 Smoking marijuana at a party	Good	3.0	10.0	21.0	27.0	14.0
	Bad	97.0	90.0	79.0	73.0	86.0
26 Using marijuana to relax	Good	3.0	11.0	18.0	23.0	13.0
	Bad	97.0	89.0	82.0	77.0	87.0
27 Using marijuana everyday	Good	1.0	3.0	7.0	9.0	5.0
	Bad	99.0	97.0	93.0	91.0	95.0

The first and second most frequently selected responses were "Try to get them to stop smoking marijuana" and "Find a new group of friends." The percentage of students who chose these responses decreased with each increase in grade level. The least frequently selected responses were "Tell your parents . . ." and "Tell school people or police . . ." Three responses increased in frequency of selection with each increase in grade level. These responses were "Say no, but still hang around with them" (from 9.5% to 25.5%), "Avoid being with them when they smoke marijuana (from 14% to 22%), and "Start smoking marijuana with them" (1% to 11%). Approximately 8.5% of the total sample selected the response, "Try smoking marijuana once and then stop." Almost 7% of 6th grade and 20% of 12th grade students indicated that they would yield to the peer influence and use marijuana.

Table LVI
Student Decisions Regarding Marijuana Use in a Group Situation

	6th Grade	8th Grade	10th Grade	12th Grade	Total
Try smoking marijuana once and then stop	6.0	10.0	9.0	8.5	8.5
Start smoking marijuana with them	1.0	5.0	9.0	11.0	6.5
Say no, but still hang around	9.5	14.0	21.0	25.5	18.0
Avoid being with them when they smoke marijuana	14.0	16.0	19.5	22.0	18.0
Try to get them to stop smoking marijuana	29.5	25.0	21.0	19.0	23.5
Find a new group of friends	23.0	23.0	17.0	12.5	18.5
Tell your parents about the situation and follow their advice	14.0	6.0	3.5	2.0	6.0
Tell school people or police and let them take care of it	4.0	.5	.5	0.0	1.0

4. Other Substances and Personal Variables

This section reports findings relative to motives for using and not using other drugs, and attitudes toward specific tobacco use or nonuse behaviors. The 1981 youth survey did not include questions designed to assess motives for using or not using tobacco nor did the survey include attitudinal questions related to specific drug use or nonuse behaviors. No decision-making situations were presented for tobacco or other drugs.

Question 46 required students to "check what you think are the two most important reasons for people not using other drugs such as uppers, downers, or hallucinogens." Student responses to this question are described in Table LVII.

The two most frequently selected reasons for not using other drugs, regardless of grade level, were "Other drugs are dangerous to their physical or mental health" (30-32%) and "They might become addicted to the other drug" (22-27%). The two least frequently chosen reasons for not using other drugs, regardless of grade level, were "They have better things to do" (5%) and "They don't like the people who use other drugs" (3.5-4.5%). The first, second, and third most frequently chosen reasons for not using other drugs in 1981 were identical to the findings of the 1978 youth survey.

Grade level comparisons indicated that two reasons for nonuse decreased in frequency of choice with each increase in grade level. These reasons were "There are too many risks . . ." and "It's part of dropping out . . ." One reason for nonuse, "It's against their personal or religious beliefs," increased in frequency of choice with each increase in grade level.

The motives for using other drugs were identified through question 49: "Check what you think are the two most important reasons for people using other drugs such as downers, uppers, or hallucinogens." Students could select from seven possible responses. The patterns of student responses are reported in Table LVIII.

Table LVII
Motives for Not Using Other Drugs

	6th Grade	8th Grade	10th Grade	12th Grade	Total	Ranking in 1978
Other drugs are dangerous to their physical or mental health	32.0	32.0	30.0	31.5	31.5	1
They might become addicted to the other drug	24.0	26.5	23.0	22.0	24.0	2
There are too many risks of trouble with the police, employers or school people	12.5	12.5	11.0	9.0	11.5	3
It's part of dropping out of life and they don't want to do that	13.5	10.5	10.0	8.0	10.5	5
It's against their personal or religious beliefs	3.0	4.5	9.5	11.5	7.0	7
They don't like the way drugs make them feel or behave	7.0	5.5	7.0	8.0	7.0	4
They have better things to do	5.0	5.0	5.0	5.0	5.0	6
They don't like the people who use other drugs	3.5	3.5	4.5	4.5	4.0	8

Table LVIII
Motives for Using Other Drugs

	6th Grade	8th Grade	10th Grade	12th Grade	Total	Ranking in 1978
To deal with the stresses and pressures of everyday life	30.0	33.0	31.0	32.5	31.5	2
Because their friends use the other drugs	21.5	21.0	18.0	15.5	19.0	6
They like the way the other drugs make them feel	11.5	15.0	18.5	22.0	16.5	3
It's part of trying new things (curiosity, adventure)	13.0	12.0	12.0	13.0	12.5	1
To feel more important or better about themselves	12.0	10.0	9.5	8.5	10.0	4
They don't see anything wrong with using other drugs	9.5	7.0	8.5	7.0	8.0	-
Because they don't have anything else to do	2.5	1.5	2.5	1.5	2.0	5

Students most often perceived, regardless of grade level, that "dealing with the stresses and pressures of everyday life" was an important reason for using other drugs. The second most frequently identified reason for using other drugs was "Because their friends use the other drugs." This response decreased in frequency of selection with each increase in grade level. The third most frequently selected response was "They like the way the other drugs make them feel." The percentage of students who chose this response increased with each increase in grade level. The two least frequently chosen responses, regardless of grade level, were "They don't see anything wrong . . ." and "Because they don't have anything better to do." A consistent percentage of students at each grade level (12-13%) selected "It's part of trying new things" as an important reason for using other drugs. Approximately 10% of all students selected "to feel more important or better about themselves" as an important reason for using other drugs.

The data in Table LIX represent student judgments about three specific tobacco use behaviors. Most students at each grade level considered "smoking tobaccco at school" to be a bad/wrong behavior. Apparently students were more tolerant or accepting of "smoking after a meal" than they were for "smoking tobacco while riding in another person's car." Student attitudes toward the three tobacco behaviors appeared to become more tolerant with each increase in grade level. The most pronounced attitude change seemed to eventuate for "smoking tobacco after a meal" since 20% of 6th grade and 48% of 12th grade students judged the behavior to be good/ok.

Table LIX
Student Attitudes Toward Specific Tobacco Behavior
(Percent of Grade Level Samples)

		6th Grade	8th Grade	10th Grade	12th Grade	Total
22 Smoking tobacco after a meal	Good	20.0	33.0	45.0	48.0	36.0
	Bad	80.0	67.0	55.0	52.0	64.0
23 Smoking tobacco while riding in another person's car	Good	11.0	20.0	30.0	34.0	23.0
	Bad	89.0	80.0	70.0	66.0	77.0
24 Smoking tobacco at schools	Good	2.0	4.0	10.0	14.0	7.0
	Bad	98.0	96.0	90.0	86.0	93.0

5. Related Behaviors

Other researchers have identified several behaviors which are associated with the nonuse of substances and several behaviors which are associated with the use of substances. Questions 92-97 asked students to estimate the number of times in the past month that they employed six types of conforming behaviors (negatively associated with substance use). Six questions (98-100) required students to estimate the number of times in the last month that they had engaged in deviant behaviors (positively associated with substance use).

The data in Table LX represent the percentages of the total 1981 sample reporting conforming behaviors in the past month. Approximately 81-85% of the youth in the 1981 survey reported that they engaged in individual or team sports, outdoor activities, and worked on a hobby within the past month. "Participation in youth clubs . . ." was the behavior least often (33% participation) reported in the survey. The data suggest that there was a 20% reduction in the number of youth participating in youth clubs during the years 1975 through 1981. Nearly 69% of the 1981 sample reported participating in church activities one or more times in the past month. This finding was in contrast to the 57% participation in church activities reported in 1975. Participation in extracurricular activities at school was reported by 63% of the youth in 1981.

Data in Table LXI represent student responses to questions 98-103 concerning deviant behaviors. The percentages were reported for the total 1981 sample with the exception of "driven a car after using alcohol or other drugs." Since more than half of the student sample could not legally drive, only 12th grade data were presented in the table.

An overview of Table LXI revealed that a very large number of youth (82-96%) did not engage in five of the six deviant behaviors. The two behaviors which youth least often (4-5%) reported having done were theft of property worth more than $15 and the sale or distribution of substances. The most frequently reported deviant behavior, exclusive of drinking and driving, was damage to public or private property (18%).

The data for 12th grade students indicated that driving a car after using alcohol or other drugs was a common behavior for that age group. Nearly 49% of the 12th grade students reported that they had driven while under the influence of a substance during the past month.

Table LX
Conforming Behaviors Reported by Total 1981 Sample

How often in the last month . . .	Never	1 or 2 Times	3 to 5 Times	6 or more Times
Play individual or team sports like golf, tennis, or football	18.0	19.0	18.0	45.0
Do outdoor activities like fishing, hiking, or biking	14.5	29.5	23.5	32.5
Work on a hobby, collection or art project	19.0	32.0	22.5	26.0
Participate in church activities like church services, Sunday school, or youth groups	31.0 (43)	19.5 (25)	23.5 (19)	25.5 (13)
Participate in youth clubs like 4-H, scouting, or YMCA	67.5 (46)	16.5 (25)	8.0 (17)	7.5 (11)
Participate in extracurricular activities at school	26.5	22.5	18.5	33.0

*Percentages of the total 1978 sample responding to these questions appear within parentheses.

Table LXI
Deviant Behaviors Reported by Total 1981 Sample

How often in the last month . . .	Never	1 or 2 Times	3 to 5 Times	6 or more Times
Given a teacher a fake excuse for being absent	83.5	13.0	2.0	1.5
Taken little things (worth $15 or less) that didn't belong to you	86.5	10.5	1.5	1.0
Damaged public or private property	82.0	14.5	2.0	1.0
Driven a car after using alcohol or other drugs (12th Grade sample only)	51.5	28.5	12.5	7.0
Taken something worth more than $15 that didn't belong to you	96.0	3.0	.5	.5
Sold or distributed marijuana or other drugs	95.0	2.3	1.3	1.4

6. Summary of Findings for Personal Variables

A number of specific findings regarding motives for using and not using substances, substance knowledge, substance attitudes, and associated behaviors were presented as personal variables which affect substance use and nonuse. Several trends or patterns appeared in these data. The following text is a summary of the trends and patterns observed in the data.

Functions of Age - Many personal variables appeared to change with age (grade level). Apparently as Iowa youth become older:

- Their attitudes toward substances and substance behaviors "softened"-youth became more tolerant or accepting of substance use.
- Their knowledge of substances and substance effects increased.
- They became more aware of peer influence on their substance use or nonuse.
- They were more likely to recognize their own personal and religious beliefs as a factor in substance use and nonuse.
- They became more aware of how their parents and families influenced the youth's substance use and nonuse.

Functions of Experience - Many personal variables were affected by experience. Several pieces of data indicated that youth became more likely to experience substance use, either directly or indirectly, with each increase in grade level. It is very likely that these substance experiences became more influential in personal substance use or nonuse decisions.

Functions of Information - Most youth (94%) recognized the need for information about substances and the consequences of substance use. Reference to Part III, however, indicated that youth were not very clear about how they have used the information relative to their personal substance use or nonuse.

Function of Enculturation - The data indicated that youth were most accepting or tolerant of "socially acceptable" substance use behaviors: alcohol use and instrumental substance use. Students learned to recognize what were positively and negatively sanctioned substance behaviors.

Function of Alternatives - The data indicate that very few youth perceived boredom (or "nothing else to do") to be an important reason for using substances. Iowa youth were substantially involved in a wide variety of constructive or conforming behaviors. Since 1975, youth have become more frequently involved in church activities.

Paradoxical Findings - Several inconsistencies were apparent among knowledge, attitudes, motives, and reported substance use. For example, most 12th grade students considered drinking and driving to be a bad/wrong behavior, but 49% of these students reported drinking and driving one or more times in the past month.

The findings for personal variables indicated areas of logical association with substance behavior. A future data analysis will attempt to assess the extent of these relationships.

VI. Summary and Recommendation

The 1981-82 Iowa Study of Alcohol and Drug Attitudes Among Youth was the third in a series of tri-annual studies. A primary goal of the study series has been to assess trends in youth's substance attitudes, knowledge, and behavior. The youth assessment has provided useful planning data for school persons and for people involved with the health of Iowa youth.

The 1981-82 youth study was specifically designed to answer four research questions:

- What is the present status of substance use, attitudes, and knowledge among youth?
- What are some important trends in youth's substance use, attitudes and knowledge?

- Who seem to be major influences in youth's decisions to use or not use substances?
- What actions do the findings of the 1981-82 study suggest for school persons and others to follow?

A 110-item youth survey was developed for the 1981-82 study. The survey instrument was designed to provide some general and specific answers to the research questions. The survey included questions regarding substance use and nonuse, motives for using and not using substances, knowledge of substance information, parent and peer substance models, attitudes toward substances, and other questions related to substance use or nonuse. The survey instrument was also designed to be read and answered anonymously by sixth, eighth, tenth, and twelfth grade students.

A stratified, random sampling of 93 public school districts was the basic sampling unit. Another set of school districts (n=18) was added to the 1981-82 sampling unit as a purposive sample since the additional districts had initiated some specific models of substance education. All school districts could elect to participate or not participate in the youth survey. A total of 88 school districts elected to participate.

The second and third sampling units were attendance centers within a school district and class enrollments in the 6th, 8th, 10th, and 12th grades. A minimum student sample was 18 at each of the 4 grade levels. Data were collected from 1,740 sixth grade, 1,749 eighth grade, 1,498 tenth grade, and 1,591 twelfth grade students. Students were also permitted to not participate in the survey. Very few students elected to not participate in the study.

The sampling design, the youth survey, and the procedures for administering the survey were very similar for the 1975, 1978, and 1981 studies. These similarities allowed for data comparisons among study years.

The 1981-82 youth data were entered on a computer file and treated according to an SAS program format. The data were reported in various tables according to topics covered in survey questions. The following outline presents major findings relevant to the four research questions.

Research Questions 1 and 2: Status and Trends

The following outline presents findings relevant to research questions 1 and 2: current status and trends in youth substance behaviors, attitudes and knowledge.

1. Alcohol Use and Nonuse in 1981

- Approximately 94% of 12th grade students had tried alcohol.
- Most youth (63-76%) had tried alcohol by age 14.
- Nearly 73% of 6th grade and 20% of 12th grade students reported themselves to be nonusers of alcohol.
- The greatest increase in the number of alcohol users seemed to occur between 8th and 10th grade.
- The largest increase (14%) in regular use of alcohol seemed to occur between 8th and 10th grades.
- The largest increase (12%) in heavy use of alcohol was observed between 10th and 12th grades.
- Females appeared to have very similar alcohol use patterns to males.
- Alcohol use appeared to be more common in rural school districts than it was in semiurban, semirural, and urban districts.
- Very few Iowa youth (14-38%) did not intend to use alcohol as adults.

2. Alcohol Use and Nonuse Trends 1975-1978-1981

Comparisons of youth data from 1975, 1978 and 1981 indicated:

- A decrease in the number of alcohol users in 1981.
- A decrease in the number of casual and heavy users of alcohol at each grade level in 1981.

- A slight increase in the number of regular users of alcohol among 12th grade students.
- A decrease in the number of alcohol users in urban, semiurban, and semirural school districts.
- An increase between 1975 and 1981 of 3% in the number of male alcohol users and an increase of 10% in the number of female alcohol users.

3. Tobacco Use and Nonuse in 1981.

- Approximately 53% of the youth in the survey had tried tobacco by 14 years of age.
- The age range 9-12 years appeared to be the period of highest initial tobacco use.
- The largest increase in the casual and regular use of tobacco seemed to occur between 8th and 10th grades.
- The largest increase in heavy use of tobacco apparently occurred between 10th and 12th grades.
- Approximately 84% of 6th and 57% of 12th grade students were nonusers of tobacco.
- Female and male tobacco use patterns were found to be very similar.
- Regular and heavy use of tobacco seemed to be more prevalent in semirural districts than in the other categories of school districts.
- Use of tobacco appeared to be more common among rural and urban youth than it was among semiurban and semirural youth.
- Approximately 80% of the youth in the survey did not intend to smoke tobacco as adults.

No data were collected on tobacco use during the 1975 and 1978 surveys.

4. Marijuana Use and Nonuse in 1981.

- Most youth who have tried marijuana were between 13 and 16 years of age.
- Nearly 44% of 12th grade students had tried marijuana.
- Approximately 23% of 10th grade and 35% of 12th grade students reported that they were current users of marijuana.
- The largest increase in the number of casual and regular users of marijuana seemed to occur between 8th and 10th grades.
- The largest increase in the number of heavy users of marijuana was evident between 10th and 12th grades.
- Few differences were found in male and female marijuana use patterns.
- Urban schools appeared to have a greater number of students who fit the casual, regular, and heavy users of marijuana categories than did the other categories of districts.
- Approximately 89% of the youth reported that they did not intend to use marijuana as adults.

5. Marijuana Use and Nonuse Trends 1975-1978-1981.

- Fewer students had tried marijuana in 1981 than had tried marijuana in 1978.
- The largest decline in marijuana use occurred within the casual use category when 1975, 1978, and 1981 data were compared.

- Youth in 1981 were using marijuana less frequently than in either 1975 or 1978.
- Marijuana use decreased in all categories of school districts.

6. Other Drug Use and Nonuse in 1981.

- A very small number (12%) of students have tried other drugs.
- The age range 13-16 years appeared to be the period of highest initial use of the other drugs.
- Very few students (6%) reported being current users of other drugs.
- The largest increase in the number of other drug users occurred between 8th and 10th grade.
- Male and female other drug use patterns were very similar.
- Very few differences were apparent in other drug use patterns when various categories of school districts were compared.

7. Other Drug Use and Nonuse Trends 1975-1978-1981

- More 12th grade students had tried other drugs in 1981 (21%) than had tried them in 1975 (11%) and in 1978 (18%).
- The frequency of other drug use has decreased among all grade levels when 1981 is compared to both 1978 and 1975.
- The number of students who reported having tried the other drugs and then stopped has increased in 1981.
- The 1981 data indicated increases in the regular use of other drugs among 10th grade students and increases in heavy use among 12th grade students.

8. Polysubstance Use and Nonuse in 1981

Polysubstance use refers to the use of two or more substances within a proscribed period of time. Computer sorts on the 1981 data resulted in the determination of the number of students who were: nonusers of any substance, users of alcohol only, users of both alcohol and marijuana, users of alcohol and other drugs, users of marijuana and other drugs, and users of all three categories of substances.

- "Alcohol only" accounted for the largest group of substance users at each grade level (25-56%).
- Very few students at any grade level were categorized as marijuana users only (.3-.4%) or other drug users only (.1-.2%).
- The most frequently reported substance combinations were "alcohol and marijuana" (1-11%) and "use of all substances" (3-10%).
- Polysubstance use appeared to be more common among urban school districts.
- Approximately 45% of the total 1981 youth sample were nonusers of both alcohol and tobacco.
- Nearly 13% of the total 1981 youth sample were users of both alcohol and tobacco.

9. Polysubstance Use and Nonuse Trends 1975-1978-1981

- The number of nonusers of any substance increased in 1981 as compared to 1975 and 1978.
- Alcohol and marijuana users and users of all substances were the categories which decreased in number from 1975 to 1981.

10. Student Attitudes Toward Substances and Substance Behaviors

A general observation from these data was that student attitudes toward substances and substance behaviors became more tolerant with each increase in grade level. The major findings regarding student substance attitudes in 1981 are listed below:

- Approximately 94% of the students at each grade level agreed that people should learn about the harmful results of using substances.
- As grade level increased, fewer students (69-53%) agreed with the statement, "It is hard for a teen to say no when offered alcohol or marijuana."
- Student attitudes toward alcohol use and instrumental substance use were very similar (e.g., 44% of 12th grade proalcohol and 46% of twelfth grade proinstrumental use).
- Large percentages of students considered drinking and driving, and drinking while pregnant to be bad/wrong behaviors.
- Drinking several alcoholic beverages at a party was approved behavior among 13% of the 6th grade and 67% of the 12th grade students.
- Approximately 41% of the 6th grade and 66% of the 12th grade students approved of drinking 2-3 alcoholic beverages after work.
- Approximately 12% of the 6th grade and 45% of the 12th grade students agreed that there is no harm in taking marijuana once or twice to find out what it is like.
- A large percentage (91-99%) of student samples considered using marijuana everyday to be a bad/wrong behavior.
- A sizeable minority (18-27%) of 10th and 12th grade students judged smoking marijuana at a party and using marijuana to relax to be good/OK behaviors.
- Nearly 20% of 6th grade and 48% of 12th grade students considered smoking tobacco after a meal to be a good/OK behavior.

11. Substance Knowledge Among Students.

Fourteen questions were included in the survey to assess student knowledge about substances. Students were more likely to answer questions correctly with each increase in grade level.

- Students most frequently knew the correct answers to questions concerning smoking and pregnancy, tolerance for a substance, alcohol interactions, and the harmful effects of marijuana use.
- Students were least often correct in answering questions concerning the legal level of intoxication and the effects of amphetamines and caffeine.

Research Question 2: Influences On Youth Substance Decisions

Many survey questions were designed to assess the influence exerted by several external sources: parents, school, peers, and others. Another set of questions attempted to assess internal sources of influence (personal variables). A listing of the major findings concerning external and internal sources of influence are reported below.

1. External Sources of Influence

- **Parents** consistently ranked first as influencers to not use alcohol, tobacco, marijuana, and other drugs. Parents were most frequently cited as a source of substance information. Parents ranked second (in terms of frequency of selection) to peers as a source of help for a substance problem.

- **Peers** ranked third as an influencer to not use substances. Peers ranked second as a source of information and first as a source of help.

- **School persons** (teacher, nurse, and counselor) ranked second as an influencer to not use substances, third as a source of substance information, and seventh (out of nine sources) as a source of help for a substance problem.

- **Siblings** ranked fourth as an influencer to not use substances, sixth as a source of information and fifth as a source of help.

Specific findings for external sources are as follows:

- Approximately 33% of alcohol users, 31% of tobacco users, and 60% of marijuana users reported that their parents did not know about the students' substance use.

- Nearly 54% of alcohol users, 61% of tobacco users, and 29% of marijuana users reported that their parents knew about these substance behaviors.

- Students reported that 56% of their mothers and 30% of their fathers never smoked tobacco. This compares with 57% of the 12th grade students who reported not using tobacco. Students also reported that 11% of their mothers and 19% of their fathers had stopped smoking. Nineteen percent of 12th grade students reported having stopped smoking.

- Students reported that nearly 29% of their mothers and 13% of their fathers never drank. Moderate drinking (occasionally drinks a few drinks each week) were reported for 59% of the mothers and 60% of the fathers. Nearly 63% of the 12th grade students reported being moderate drinkers.

- Personal contact with peers who used alcohol, marijuana, and tobacco became more and more likely with each increase in grade level.

- Approximately 46% of 12th grade and 34% of 10th grade students reported that their friends would approve of them getting drunk once or twice every week.

- Nearly 30% of 12th grade and 23% of 10th grade students reported that their friends would approve of them smoking marijuana.

- Approximately 85% of the students indicated that they felt the school substance education program was very useful or of some use to them. School programs were rated favorably by 79% of the students in the 1978 youth survey.

- Student data indicated that school persons were most likely to discuss marijuana and other drugs in the classroom and least likely to discuss alcohol and tobacco.

- Apparently school programs have influenced a large number (32-47%) of students to not use substances and reinforced the 36-38% of students who had previously decided to not use other drugs, marijuana, and tobacco. School programs appeared to exert the most positive influence on other drug and marijuana nonuse behaviors. A small percentage of students (2-5%) reported that school programs had influenced them to stop using substances. School programs had the least positive influence on student alcohol nonuse behaviors and the most positive influence on other drug nonuse behaviors.

2. Internal Sources of Influence (Personal Variables)

Internal sources of influence on substance use and nonuse behavior included attitudes about substances and substance behaviors, perceived motives for using/not using substances, conforming behaviors/noncoforming behaviors, and decision making. Findings regarding motives, decision making, and related behaviors were not reported earlier in this summary. Relevant findings for these remaining variables are listed below.

Motives for Not Using

- Students most frequently selected ". . . is dangerous to their physical or mental health" as an important reason for not using alcohol (20% of total sample), marijuana (34% of total sample), and other drugs (32% of total sample).

- One reason for not using substances increased in frequency of selection with each increase in grade level. . . "is against their personal or religious beliefs."

- The most frequently chosen reason for not using alcohol was "They might get into an accident and hurt someone."

Motives for Using

- Students most frequently selected "Because their (families and) friends use . . ." as an important reason for using alcohol (13% of total sample), marijuana (23% of total sample), and other drugs (19% of total sample).

- The response choice, "They like the way makes them feel," was a frequently selected reason for using alcohol (17% of total sample), marijuana (18% of total sample), and other drugs (17% of total sample).

- Two responses, "like the way makes them feel," and "to have a good time with people," increased in the frequency of selection with each increase in grade level.

- Two reasons for using marijuana, "it's part of trying new things" and "because their friends use marijuana," were the two most frequently (21-25%) selected responses regardless of grade level.

- Students most often perceived, regardless of grade level, that "dealing with the stresses and pressures of everyday life" was an important reason for using other drugs.

Decision Making in Substance Situations

- Two questions presented situations in which peers were attempting to persuade a youth to use alcohol. There were eight possible responses for each question from which students could select only one. In both situations more students reported that they would acquiesce to peer influence to drink with each increase in grade level. For example, 11% of the 6th grade students reported that they would drink a can of beer offered by a friend and 62% of the 12th grade students also selected this response. In the second situation, 19% of the 6th grade and 71% of the 12th grade students reported that they would concur with their friends' plans and drink.

- One question described a situation which involved peer influence to use marijuana. Almost 7% of 6th grade and 20% of 12th grade students indicated that they would yield to the peer influence and use marijuana.

Related Behaviors

- Approximately 81-85% of the youth in the 1981 survey reported that they engaged in individual or team sports, outdoor activities, and worked on a hobby one or more times in the past month. Nearly 69% of the total sample reported participating in church activities one or more times in the past month. Sixty-three percent of the students reported participating in extracurricular activities at school.

- Most students (82-96%) did not participate in five of the six deviant behaviors listed during the previous month. The most frequently mentioned (18%) deviant behavior, with the exception of driving while under the influence, was damage to public or private property. The data for 12th grade students revealed that 46% of them had driven a car after using alcohol or other drugs on one or more occasions in the past month.

Research Question 4: Recommended Actions for School Persons and Others to Follow

The 1981-82 Iowa Study of Alcohol and Drug Attitudes and Behavior Among Youth provided a very broad perspective on substance use in Iowa. A considerable amount of information from the three study years of 1975, 1978, and 1981 has been condensed in this report.

Five major themes were consistently repeated throughout the youth surveys:

- Youth decide to use or not use substances.
- Peers, parents, school persons, and others exert their influence on a youth's decisions to use or not use substances.
- Many factors within the individual (e.g., values, personal or religious beliefs, self-esteem) strongly influence his/her substance use or nonuse behaviors.
- Adolescence is a very healthy life stage through which most Iowa youth pass successfully.
- All adolescents are **not** basically alike. It is damaging and misleading to generalize to all youth the behaviors, problems, and characteristics exhibited by a few.

The five themes and the data from youth logically lead to some specific recommendations for school persons, families, and persons who provide services for youth.

The following paragraphs describe some specific actions which could be taken to respond to student substance use. Less obvious, however, are actions and communications which need to be undertaken in relationship to the phenomena of modeling, imitation, identification, and socialization. Youth receive some very diverse messages from their parents, peers, school persons, and the media regarding substances and substance behavior. Recommendations regarding these social influences are necessarily delimited to those actions supported by the data in the three youth surveys.

1. Recommendations for School Persons

Curriculum and Instruction - Students expect schools to be a primary source of information about substances and substance behaviors. School persons must recognize the appropriateness and credibility of the information they present. Such information and the methods by which it is presented should match the developmental concerns and interests of students. Classroom instruction should help students to reduce the ambivalence and/or confusion between their substance attitudes, motives, knowledge, and actual substance behaviors. Specifically, school persons should:

- Reassess the time and emphasis given to specific substances and substance behaviors. Evidently, a great deal of instructional time is given to the "other drugs" (i.e., amphetamines and heroin) and considerably less to alcohol and tobacco.
- Evaluate what are the major concepts which should be learned through the substance education program. Particularly important are the concepts of substance interactions, substance dependency, prevention of substance abuse, and responsible use of medicines and over-the-counter drugs.
- Recognize in curriculum and instruction the developmental shift from student concerns at the elementary level (i.e., health facts and safety) to their concerns at the secondary level (i.e., personal and social aspects of substance use and nonuse).
- Curriculum and instruction should emphasize the decision-making process applied to substance behaviors.

School Interventions - Students and their parents look to schools as a source of help for problems related to substance use. Early identification and early interventions are plausible roles for school persons, especially in the following circumstances:

- students who have become dependent upon substances
- students who are regular or heavy users of substances and wish to stop or cut back
- students who are seeking help for a friend or sibling
- students who are experiencing personal and/or school problems related to their parents' substance use
- students who wish to return to school after completing a substance abuse treatment program

School persons should reconsider their roles, policies, and procedures for getting or giving help to students in each of the above-mentioned circumstances. Many Iowa youth, however, indicate that they consider school personnel to be a "threat" (i.e., judgemental attitudes and punitive approaches) to obtaining such help. Five specific actions are suggested by this information and youth data:

- Review school policies and procedures in respect to the student circumstances listed above. Many school policies are delimited to disciplinary actions as the sole response to student substance use.

- Reassess working relationships with substance abuse and other community helping services. It may be necessary for schools to act as a catalyst to develop needed services for youth and their families.

- Seek two forms of additional training for school personnel: 1) a general staff training to recognize substance problems and how to initiate helpful communications with students regarding these problems and 2) a focused training for selected school personnel so that they can function as intervention agents.

- Publicly recognize the reality of student substance use. A periodic youth assessment will indicate the extent of substance use and help set directions for the school's response to student substance use.

- Consider implementing a "peer helper" program at the secondary level. The youth data clearly indicates that youth will turn to their peers for substance information and for help. The data also indicate that many youth would respond to peer support to not use substances. Peer helping has functioned effectively as both a prevention and intervention approach.

2. Recommendations for Parents and Families

Many parents and families can be reassured that they are "doing some things right." Parents are perceived by youth to exert many positive influences on their substance behaviors. All parents and families should be encouraged to not forfeit their influence when children become teens. Some specific recommendations are apparent:

- Children and youth strongly identify with the substance behaviors of their parents and siblings. Family members must be willing to examine their own substance use behaviors and change those which they don't wish youth to adopt.

- Families should find the time to discuss guidelines or rules regarding the use or nonuse of alcohol, tobacco, medicines, over-the-counter drugs, and other substances. Considerable confusion exists between youth and their families regarding what are acceptable and unacceptable substance behaviors.

- Many communities allow families of substance-dependent youth to remain isolated. Such families can offer encouragement and support to one another as they try to cope with the problems associated with substance dependency/abuse among their children. Family support groups are very important in the whole continuum from confronting substance abuse/dependency through treatment and aftercare.

- Parents should be encouraged to get to know their children's friends and their friends' parents. Such communication networks will help to dispel the notion that "everyone else is doing it" or that other families condone substance use by youth.

- Substance education begins very early through the broadcast media. Family members need to be well enough informed that they might effectively counteract the negative media messages their children receive. For example, most media messages regarding alcohol and over-the-counter substances repeat the theme "you have a right to feel good" and our product will make you feel good or better.

3. Recommendations for Youth Serving Agencies

Approximately 9% of Iowa youth indicated that they would turn to a crisis line or substance abuse treatment center if they had a personal problem related to substance use. Nearly 30% of the students reported that they would seek help from substance abuse professionals if they were the parents of an adolescent with substance abuse problems.

Evidently, several factors are operative in interventions with Iowa youth: 1) a stigma (denial and embarrassment) associated with seeking professional help for oneself, 2) a shortage of local services for adolescent clients, 3) an ineffective outreach effort by some local agencies, and 4) poor referral and follow-up

arrangements between schools and local agencies. Helping agencies should assess each of the factors mentioned in relationship to the services they actually offer to youth and their families.

Community agencies and schools have developed some effective systems for identifying students who are experiencing problems and for providing the necessary help and follow-up. Most notable among the models are the Student Assistance Program (National Council on Alcoholism in Des Moines) and intervention models initiated by Community Interventions in Minneapolis.

Other community groups (e.g., 4-H, scouts, church youth groups) can offer youth some involvement and investment in nonsubstance alternatives. Such alternative behaviors should help youth to meet some very important needs (e.g., sense of belonging, care-giving, achievement, and fun and adventure) without resorting to substance use. Youth should be involved in developing and implementing the alternative activities or programs.